

# Amazon IoT



# Amazon IoT: API Reference

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# Welcome

## Amazon IoT

Amazon IoT provides secure, bi-directional communication between Internet-connected devices (such as sensors, actuators, embedded devices, or smart appliances) and the Amazon cloud. You can discover your custom IoT-Data endpoint to communicate with, configure rules for data processing and integration with other services, organize resources associated with each device (Registry), configure logging, and create and manage policies and credentials to authenticate devices.

The service endpoints that expose this API are listed in [Amazon IoT Core Endpoints and Quotas](#). You must use the endpoint for the region that has the resources you want to access.

The service name used by [Amazon Signature Version 4](#) to sign the request is: *execute-api*.

For more information about how Amazon IoT works, see the [Developer Guide](#).

For information about how to use the credentials provider for Amazon IoT, see [Authorizing Direct Calls to Amazon Services](#).

## Amazon IoT data

Amazon IoT data enables secure, bi-directional communication between Internet-connected things (such as sensors, actuators, embedded devices, or smart appliances) and the Amazon cloud. It implements a broker for applications and things to publish messages over HTTP (Publish) and retrieve, update, and delete shadows. A shadow is a persistent representation of your things and their state in the Amazon cloud.

Find the endpoint address for actions in Amazon IoT data by running this CLI command:

```
aws iot describe-endpoint --endpoint-type iot:Data-ATS
```

The service name used by [AmazonSignature Version 4](#) to sign requests is: *iotdevicegateway*.

## Amazon IoT jobs data

Amazon IoT Jobs is a service that allows you to define a set of jobs — remote operations that are sent to and executed on one or more devices connected to Amazon IoT Core. For example, you can



define a job that instructs a set of devices to download and install application or firmware updates, reboot, rotate certificates, or perform remote troubleshooting operations.

Find the endpoint address for actions in the Amazon IoT jobs data plane by running this CLI command:

```
aws iot describe-endpoint --endpoint-type iot:Jobs
```

The service name used by [Amazon Signature Version 4](#) to sign requests is: *iot-jobs-data*.

To create a job, you make a job document which is a description of the remote operations to be performed, and you specify a list of targets that should perform the operations. The targets can be individual things, thing groups or both.

Amazon IoT Jobs sends a message to inform the targets that a job is available. The target starts the execution of the job by downloading the job document, performing the operations it specifies, and reporting its progress to Amazon IoT Core. The Jobs service provides commands to track the progress of a job on a specific target and for all the targets of the job

## Amazon IoT Core Device Advisor

Amazon IoT Core Device Advisor is a cloud-based, fully managed test capability for validating IoT devices during device software development. Device Advisor provides pre-built tests that you can use to validate IoT devices for reliable and secure connectivity with Amazon IoT Core before deploying devices to production. By using Device Advisor, you can confirm that your devices can connect to Amazon IoT Core, follow security best practices and, if applicable, receive software updates from IoT Device Management. You can also download signed qualification reports to submit to the Amazon Partner Network to get your device qualified for the Amazon Partner Device Catalog without the need to send your device in and wait for it to be tested.

## Amazon IoT Fleet Hub

With Fleet Hub for Amazon IoT Device Management you can build stand-alone web applications for monitoring the health of your device fleets.

### Note

Amazon will discontinue the Amazon IoT Device Management Fleet Hub feature on October 18, 2025 and is no longer accepting new customers. Existing Amazon IoT Device

Management Fleet Hub customers will be able to use Fleet Hub until October 17, 2025. For more information, [Fleet Hub end-of-life \(EOL\) FAQs](#).

## Amazon IoT Secure Tunneling

Amazon IoT Secure Tunneling creates remote connections to devices deployed in the field.

For more information about how Amazon IoT Secure Tunneling works, see [Amazon IoT Secure Tunneling](#).

# Actions

The following actions are supported by Amazon IoT:

- [AcceptCertificateTransfer](#)
- [AddThingToBillingGroup](#)
- [AddThingToThingGroup](#)
- [AssociateSbomWithPackageVersion](#)
- [AssociateTargetsWithJob](#)
- [AttachPolicy](#)
- [AttachPrincipalPolicy](#)
- [AttachSecurityProfile](#)
- [AttachThingPrincipal](#)
- [CancelAuditMitigationActionsTask](#)
- [CancelAuditTask](#)
- [CancelCertificateTransfer](#)
- [CancelDetectMitigationActionsTask](#)
- [CancelJob](#)
- [CancelJobExecution](#)
- [ClearDefaultAuthorizer](#)
- [ConfirmTopicRuleDestination](#)
- [CreateAuditSuppression](#)
- [CreateAuthorizer](#)
- [CreateBillingGroup](#)
- [CreateCertificateFromCsr](#)
- [CreateCertificateProvider](#)
- [CreateCommand](#)
- [CreateCustomMetric](#)
- [CreateDimension](#)
- [CreateDomainConfiguration](#)
- [CreateDynamicThingGroup](#)

- [CreateFleetMetric](#)
- [CreateJob](#)
- [CreateJobTemplate](#)
- [CreateKeysAndCertificate](#)
- [CreateMitigationAction](#)
- [CreateOTAUpdate](#)
- [CreatePackage](#)
- [CreatePackageVersion](#)
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- [CreatePolicyVersion](#)
- [CreateProvisioningClaim](#)
- [CreateProvisioningTemplate](#)
- [CreateProvisioningTemplateVersion](#)
- [CreateRoleAlias](#)
- [CreateScheduledAudit](#)
- [CreateSecurityProfile](#)
- [CreateStream](#)
- [CreateThing](#)
- [CreateThingGroup](#)
- [CreateThingType](#)
- [CreateTopicRule](#)
- [CreateTopicRuleDestination](#)
- [DeleteAccountAuditConfiguration](#)
- [DeleteAuditSuppression](#)
- [DeleteAuthorizer](#)
- [DeleteBillingGroup](#)
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- [DeleteThingGroup](#)
- [DeleteThingType](#)
- [DeleteTopicRule](#)
- [DeleteTopicRuleDestination](#)
- [DeleteV2LoggingLevel](#)
- [DeprecateThingType](#)
- [DescribeAccountAuditConfiguration](#)

- [DescribeAuditFinding](#)
- [DescribeAuditMitigationActionsTask](#)
- [DescribeAuditSuppression](#)
- [DescribeAuditTask](#)
- [DescribeAuthorizer](#)
- [DescribeBillingGroup](#)
- [DescribeCACertificate](#)
- [DescribeCertificate](#)
- [DescribeCertificateProvider](#)
- [DescribeCustomMetric](#)
- [DescribeDefaultAuthorizer](#)
- [DescribeDetectMitigationActionsTask](#)
- [DescribeDimension](#)
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- [StartOnDemandAuditTask](#)
- [StartThingRegistrationTask](#)
- [StopThingRegistrationTask](#)
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- [TestAuthorization](#)
- [TestInvokeAuthorizer](#)

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The following actions are supported by Amazon IoT data:

- [DeleteThingShadow](#)
- [GetRetainedMessage](#)
- [GetThingShadow](#)
- [ListNamedShadowsForThing](#)
- [ListRetainedMessages](#)
- [Publish](#)
- [UpdateThingShadow](#)

The following actions are supported by Amazon IoT jobs data:

- [DescribeJobExecution](#)
- [GetPendingJobExecutions](#)
- [StartCommandExecution](#)
- [StartNextPendingJobExecution](#)
- [UpdateJobExecution](#)

The following actions are supported by Amazon IoT Core Device Advisor:

- [CreateSuiteDefinition](#)
- [DeleteSuiteDefinition](#)
- [GetEndpoint](#)
- [GetSuiteDefinition](#)
- [GetSuiteRun](#)
- [GetSuiteRunReport](#)
- [ListSuiteDefinitions](#)
- [ListSuiteRuns](#)

- [ListTagsForResource](#)
- [StartSuiteRun](#)
- [StopSuiteRun](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateSuiteDefinition](#)

The following actions are supported by Amazon IoT Fleet Hub:

- [CreateApplication](#)
- [DeleteApplication](#)
- [DescribeApplication](#)
- [ListApplications](#)
- [ListTagsForResource](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateApplication](#)

The following actions are supported by Amazon IoT Secure Tunneling:

- [CloseTunnel](#)
- [DescribeTunnel](#)
- [ListTagsForResource](#)
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- [OpenTunnel](#)
- [RotateTunnelAccessToken](#)
- [TagResource](#)
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## Amazon IoT

The following actions are supported by Amazon IoT:

- [AcceptCertificateTransfer](#)
- [AddThingToBillingGroup](#)
- [AddThingToThingGroup](#)
- [AssociateSbomWithPackageVersion](#)
- [AssociateTargetsWithJob](#)
- [AttachPolicy](#)
- [AttachPrincipalPolicy](#)
- [AttachSecurityProfile](#)
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- [CancelAuditMitigationActionsTask](#)
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- [CancelDetectMitigationActionsTask](#)
- [CancelJob](#)
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- [DescribeAuditTask](#)
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# AcceptCertificateTransfer

Service: Amazon IoT

Accepts a pending certificate transfer. The default state of the certificate is INACTIVE.

To check for pending certificate transfers, call [ListCertificates](#) to enumerate your certificates.

Requires permission to access the [AcceptCertificateTransfer](#) action.

## Request Syntax

```
PATCH /accept-certificate-transfer/certificateId?setAsActive=setAsActive HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [certificateId](#)

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: Yes

### [setAsActive](#)

Specifies whether the certificate is active.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.



## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **TransferAlreadyCompletedException**

You can't revert the certificate transfer because the transfer is already complete.

HTTP Status Code: 410

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# AddThingToBillingGroup

Service: Amazon IoT

Adds a thing to a billing group.

Requires permission to access the [AddThingToBillingGroup](#) action.

## Request Syntax

```
PUT /billing-groups/addThingToBillingGroup HTTP/1.1
Content-type: application/json
```

```
{
  "billingGroupArn": "string",
  "billingGroupName": "string",
  "thingArn": "string",
  "thingName": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [billingGroupArn](#)

The ARN of the billing group.

Type: String

Required: No

### [billingGroupName](#)

The name of the billing group.

#### Note

This call is asynchronous. It might take several seconds for the detachment to propagate.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### thingArn

The ARN of the thing to be added to the billing group.

Type: String

Required: No

### thingName

The name of the thing to be added to the billing group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

## InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
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- [Amazon SDK for Ruby V3](#)

# AddThingToThingGroup

Service: Amazon IoT

Adds a thing to a thing group.

Requires permission to access the [AddThingToThingGroup](#) action.

## Request Syntax

```
PUT /thing-groups/addThingToThingGroup HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "overrideDynamicGroups": boolean,
  "thingArn": "string",
  "thingGroupArn": "string",
  "thingGroupName": "string",
  "thingName": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [overrideDynamicGroups](#)

Override dynamic thing groups with static thing groups when 10-group limit is reached. If a thing belongs to 10 thing groups, and one or more of those groups are dynamic thing groups, adding a thing to a static group removes the thing from the last dynamic group.

Type: Boolean

Required: No

### [thingArn](#)

The ARN of the thing to add to a group.

Type: String

Required: No

### thingGroupArn

The ARN of the group to which you are adding a thing.

Type: String

Required: No

### thingGroupName

The name of the group to which you are adding a thing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### thingName

The name of the thing to add to a group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
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- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)



- [Amazon SDK for Ruby V3](#)

# AssociateSbomWithPackageVersion

Service: Amazon IoT

Associates the selected software bill of materials (SBOM) with a specific software package version.

Requires permission to access the [AssociateSbomWithPackageVersion](#) action.

## Request Syntax

```
PUT /packages/packageName/versions/versionName/sbom?clientToken=clientToken HTTP/1.1  
Content-type: application/json
```

```
{  
  "sbom": {  
    "s3Location": {  
      "bucket": "string",  
      "key": "string",  
      "version": "string"  
    }  
  }  
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [clientToken](#)

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern:  $\backslash S\{36, 64\}$

### [packageName](#)

The name of the new software package.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern:  $[a-zA-Z0-9-_.]+$

Required: Yes

### versionName

The name of the new package version.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_.]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### sbom

A specific software bill of materials associated with a software package version.

Type: [Sbom](#) object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "packageName": "string",
  "sbom": {
    "s3Location": {
      "bucket": "string",
      "key": "string",
      "version": "string"
    }
  },
  "sbomValidationStatus": "string",
  "versionName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### packageName

The name of the new software package.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.]+

### sbom

A specific software bill of materials associated with a software package version.

Type: [Sbom](#) object

### sbomValidationStatus

The status of the initial validation for the software bill of materials against the Software Package Data Exchange (SPDX) and CycloneDX industry standard formats.

Type: String

Valid Values: IN\_PROGRESS | FAILED | SUCCEEDED

### versionName

The name of the new package version.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_.]+

## Errors

### **ConflictException**

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### **InternalServerErrorException**

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceQuotaExceededException**

Service quota has been exceeded.

HTTP Status Code: 402

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **ValidationException**

The request is not valid.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for JavaScript V3](#)
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# AssociateTargetsWithJob

Service: Amazon IoT

Associates a group with a continuous job. The following criteria must be met:

- The job must have been created with the `targetSelection` field set to "CONTINUOUS".
- The job status must currently be "IN\_PROGRESS".
- The total number of targets associated with a job must not exceed 100.

Requires permission to access the [AssociateTargetsWithJob](#) action.

## Request Syntax

```
POST /jobs/jobId/targets?namespaceId=namespaceId HTTP/1.1
Content-type: application/json

{
  "comment": "string",
  "targets": [ "string" ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### jobId

The unique identifier you assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

### namespaceId

The namespace used to indicate that a job is a customer-managed job.

When you specify a value for this parameter, Amazon IoT Core sends jobs notifications to MQTT topics that contain the value in the following format.

`$aws/things/THING_NAME/jobs/JOB_ID/notify-namespace-NAMESPACE_ID/`

**Note**

The namespaceId feature is only supported by Amazon IoT Greengrass at this time. For more information, see [Setting up Amazon IoT Greengrass core devices](#).

Pattern: `[a-zA-Z0-9_-]+`

## Request Body

The request accepts the following data in JSON format.

### comment

An optional comment string describing why the job was associated with the targets.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: No

### targets

A list of thing group ARNs that define the targets of the job.

Type: Array of strings

Array Members: Minimum number of 1 item.

Length Constraints: Maximum length of 2048.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```



```
{
  "description": "string",
  "jobArn": "string",
  "jobId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### description

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

### jobArn

An ARN identifying the job.

Type: String

### jobId

The unique identifier you assigned to this job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

## Errors

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# AttachPolicy

Service: Amazon IoT

Attaches the specified policy to the specified principal (certificate or other credential).

Requires permission to access the [AttachPolicy](#) action.

## Request Syntax

```
PUT /target-policies/policyName HTTP/1.1
Content-type: application/json

{
  "target": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [policyName](#)

The name of the policy to attach.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [target](#)

The [identity](#) to which the policy is attached. For example, a thing group or a certificate.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### LimitExceededException

A limit has been exceeded.

HTTP Status Code: 410

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# AttachPrincipalPolicy

Service: Amazon IoT

Attaches the specified policy to the specified principal (certificate or other credential).

**Note:** This action is deprecated and works as expected for backward compatibility, but we won't add enhancements. Use [AttachPolicy](#) instead.

Requires permission to access the [AttachPrincipalPolicy](#) action.

## Request Syntax

```
PUT /principal-policies/policyName HTTP/1.1
x-amzn-iot-principal: principal
```

## URI Request Parameters

The request uses the following URI parameters.

### [policyName](#)

The policy name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

### [principal](#)

The principal, which can be a certificate ARN (as returned from the CreateCertificate operation) or an Amazon Cognito ID.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401



## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# AttachSecurityProfile

Service: Amazon IoT

Associates a Device Defender security profile with a thing group or this account. Each thing group or account can have up to five security profiles associated with it.

Requires permission to access the [AttachSecurityProfile](#) action.

## Request Syntax

```
PUT /security-profiles/securityProfileName/targets?  
securityProfileTargetArn=securityProfileTargetArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### securityProfileName

The security profile that is attached.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

### securityProfileTargetArn

The ARN of the target (thing group) to which the security profile is attached.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **VersionConflictException**

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# AttachThingPrincipal

Service: Amazon IoT

Attaches the specified principal to the specified thing. A principal can be X.509 certificates, Amazon Cognito identities or federated identities.

Requires permission to access the [AttachThingPrincipal](#) action.

## Request Syntax

```
PUT /things/thingName/principals?thingPrincipalType=thingPrincipalType HTTP/1.1
x-amzn-principal: principal
```

## URI Request Parameters

The request uses the following URI parameters.

### [principal](#)

The principal, which can be a certificate ARN (as returned from the CreateCertificate operation) or an Amazon Cognito ID.

Required: Yes

### [thingName](#)

The name of the thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

### [thingPrincipalType](#)

The type of the relation you want to specify when you attach a principal to a thing.

- **EXCLUSIVE\_THING** - Attaches the specified principal to the specified thing, exclusively. The thing will be the only thing that's attached to the principal.
- **NON\_EXCLUSIVE\_THING** - Attaches the specified principal to the specified thing. Multiple things can be attached to the principal.

Valid Values: EXCLUSIVE\_THING | NON\_EXCLUSIVE\_THING

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CancelAuditMitigationActionsTask

Service: Amazon IoT

Cancels a mitigation action task that is in progress. If the task is not in progress, an `InvalidRequestException` occurs.

Requires permission to access the [CancelAuditMitigationActionsTask](#) action.

## Request Syntax

```
PUT /audit/mitigationactions/tasks/taskId/cancel HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### taskId

The unique identifier for the task that you want to cancel.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9_-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.



## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# CancelAuditTask

Service: Amazon IoT

Cancels an audit that is in progress. The audit can be either scheduled or on demand. If the audit isn't in progress, an "InvalidRequestException" occurs.

Requires permission to access the [CancelAuditTask](#) action.

## Request Syntax

```
PUT /audit/tasks/taskId/cancel HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### taskId

The ID of the audit you want to cancel. You can only cancel an audit that is "IN\_PROGRESS".

Length Constraints: Minimum length of 1. Maximum length of 40.

Pattern: [a-zA-Z0-9\ - ]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# CancelCertificateTransfer

Service: Amazon IoT

Cancels a pending transfer for the specified certificate.

**Note** Only the transfer source account can use this operation to cancel a transfer. (Transfer destinations can use [RejectCertificateTransfer](#) instead.) After transfer, Amazon IoT returns the certificate to the source account in the INACTIVE state. After the destination account has accepted the transfer, the transfer cannot be cancelled.

After a certificate transfer is cancelled, the status of the certificate changes from PENDING\_TRANSFER to INACTIVE.

Requires permission to access the [CancelCertificateTransfer](#) action.

## Request Syntax

```
PATCH /cancel-certificate-transfer/certificateId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [certificateId](#)

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **TransferAlreadyCompletedException**

You can't revert the certificate transfer because the transfer is already complete.

HTTP Status Code: 410

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# CancelDetectMitigationActionsTask

Service: Amazon IoT

Cancels a Device Defender ML Detect mitigation action.

Requires permission to access the [CancelDetectMitigationActionsTask](#) action.

## Request Syntax

```
PUT /detect/mitigationactions/tasks/taskId/cancel HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### taskId

The unique identifier of the task.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CancelJob

Service: Amazon IoT

Cancels a job.

Requires permission to access the [CancelJob](#) action.

## Request Syntax

```
PUT /jobs/jobId/cancel?force=force HTTP/1.1
Content-type: application/json
```

```
{
  "comment": "string",
  "reasonCode": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### force

(Optional) If `true` job executions with status "IN\_PROGRESS" and "QUEUED" are canceled, otherwise only job executions with status "QUEUED" are canceled. The default is `false`.

Canceling a job which is "IN\_PROGRESS", will cause a device which is executing the job to be unable to update the job execution status. Use caution and ensure that each device executing a job which is canceled is able to recover to a valid state.

### jobId

The unique identifier you assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9_-]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### comment

An optional comment string describing why the job was canceled.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: No

### reasonCode

(Optional)A reason code string that explains why the job was canceled.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\p{Upper}\p{Digit}_]+`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "description": "string",
  "jobArn": "string",
  "jobId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### description

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

### **jobArn**

The job ARN.

Type: String

### **jobId**

The unique identifier you assigned to this job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

## **Errors**

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CancelJobExecution

Service: Amazon IoT

Cancels the execution of a job for a given thing.

Requires permission to access the [CancelJobExecution](#) action.

## Request Syntax

```
PUT /things/thingName/jobs/jobId/cancel?force=force HTTP/1.1
Content-type: application/json

{
  "expectedVersion": number,
  "statusDetails": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [force](#)

(Optional) If `true` the job execution will be canceled if it has status `IN_PROGRESS` or `QUEUED`, otherwise the job execution will be canceled only if it has status `QUEUED`. If you attempt to cancel a job execution that is `IN_PROGRESS`, and you do not set `force` to `true`, then an `InvalidStateTransitionException` will be thrown. The default is `false`.

Canceling a job execution which is `"IN_PROGRESS"`, will cause the device to be unable to update the job execution status. Use caution and ensure that the device is able to recover to a valid state.

### [jobId](#)

The ID of the job to be canceled.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9_-]+`

Required: Yes

### thingName

The name of the thing whose execution of the job will be canceled.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### expectedVersion

(Optional) The expected current version of the job execution. Each time you update the job execution, its version is incremented. If the version of the job execution stored in Jobs does not match, the update is rejected with a VersionMismatch error, and an ErrorResponse that contains the current job execution status data is returned. (This makes it unnecessary to perform a separate DescribeJobExecution request in order to obtain the job execution status data.)

Type: Long

Required: No

### statusDetails

A collection of name/value pairs that describe the status of the job execution. If not specified, the statusDetails are unchanged. You can specify at most 10 name/value pairs.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: [a-zA-Z0-9:\_-]+

Value Length Constraints: Minimum length of 1.

Value Pattern: [^\p{C}]+

Required: No



## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### InvalidStateTransitionException

An attempt was made to change to an invalid state, for example by deleting a job or a job execution which is "IN\_PROGRESS" without setting the `force` parameter.

HTTP Status Code: 409

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

## HTTP Status Code: 409

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ClearDefaultAuthorizer

Service: Amazon IoT

Clears the default authorizer.

Requires permission to access the [ClearDefaultAuthorizer](#) action.

## Request Syntax

```
DELETE /default-authorizer HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
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- [Amazon SDK for Ruby V3](#)

# ConfirmTopicRuleDestination

Service: Amazon IoT

Confirms a topic rule destination. When you create a rule requiring a destination, Amazon IoT sends a confirmation message to the endpoint or base address you specify. The message includes a token which you pass back when calling `ConfirmTopicRuleDestination` to confirm that you own or have access to the endpoint.

Requires permission to access the [ConfirmTopicRuleDestination](#) action.

## Request Syntax

```
GET /confirmdestination/confirmationToken+ HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### confirmationToken

The token used to confirm ownership or access to the topic rule confirmation URL.

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ConflictingResourceUpdateException

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateAuditSuppression

Service: Amazon IoT

Creates a Device Defender audit suppression.

Requires permission to access the [CreateAuditSuppression](#) action.

## Request Syntax

```
POST /audit/suppressions/create HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "checkName": "string",
  "clientRequestToken": "string",
  "description": "string",
  "expirationDate": number,
  "resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateArn": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "issuerCertificateIdentifier": {
      "issuerCertificateSerialNumber": "string",
      "issuerCertificateSubject": "string",
      "issuerId": "string"
    },
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "string"
  },
  "suppressIndefinitely": boolean
}
```

## URI Request Parameters

The request does not use any URI parameters.



## Request Body

The request accepts the following data in JSON format.

### checkName

An audit check name. Checks must be enabled for your account. (Use `DescribeAccountAuditConfiguration` to see the list of all checks, including those that are enabled or use `UpdateAccountAuditConfiguration` to select which checks are enabled.)

Type: String

Required: Yes

### clientRequestToken

Each audit suppression must have a unique client request token. If you try to create a new audit suppression with the same token as one that already exists, an exception occurs. If you omit this value, Amazon SDKs will automatically generate a unique client request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9-_\ ]+$`

Required: Yes

### description

The description of the audit suppression.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: `[\p{Graph}\x20]*`

Required: No

### expirationDate

The epoch timestamp in seconds at which this suppression expires.

Type: Timestamp

Required: No

### resourceIdentifier

Information that identifies the noncompliant resource.

Type: [ResourceIdentifier](#) object

Required: Yes

### suppressIndefinitely

Indicates whether a suppression should exist indefinitely or not.

Type: Boolean

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### LimitExceededException

A limit has been exceeded.

HTTP Status Code: 410

## ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateAuthorizer

Service: Amazon IoT

Creates an authorizer.

Requires permission to access the [CreateAuthorizer](#) action.

## Request Syntax

```
POST /authorizer/authorizerName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "authorizerFunctionArn": "string",
  "enableCachingForHttp": boolean,
  "signingDisabled": boolean,
  "status": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "tokenKeyName": "string",
  "tokenSigningPublicKeys": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### authorizerName

The authorizer name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@-]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### authorizerFunctionArn

The ARN of the authorizer's Lambda function.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `[\s\S]*`

Required: Yes

### enableCachingForHttp

When `true`, the result from the authorizer's Lambda function is cached for clients that use persistent HTTP connections. The results are cached for the time specified by the Lambda function in `refreshAfterInSeconds`. This value does not affect authorization of clients that use MQTT connections.

The default value is `false`.

Type: Boolean

Required: No

### signingDisabled

Specifies whether Amazon IoT validates the token signature in an authorization request.

Type: Boolean

Required: No

### status

The status of the create authorizer request.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

### tags

Metadata which can be used to manage the custom authorizer.

#### **Note**

For URI Request parameters use format: ...key1=value1&key2=value2...

For the CLI command-line parameter use format: &&tags "key1=value1&key2=value2..."

For the cli-input-json file use format: "tags": "key1=value1&key2=value2..."

Type: Array of [Tag](#) objects

Required: No

### tokenKeyName

The name of the token key used to extract the token from the HTTP headers.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### tokenSigningPublicKeys

The public keys used to verify the digital signature returned by your custom authentication service.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: [a-zA-Z0-9:\_-]+

Value Length Constraints: Maximum length of 5120.

Value Pattern: [\\s\\S]\*

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "authorizerArn": "string",
  "authorizerName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [authorizerArn](#)

The authorizer ARN.

Type: String

Length Constraints: Maximum length of 2048.

### [authorizerName](#)

The authorizer's name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=, @- ]+`

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)



- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateBillingGroup

Service: Amazon IoT

Creates a billing group. If this call is made multiple times using the same billing group name and configuration, the call will succeed. If this call is made with the same billing group name but different configuration a `ResourceAlreadyExistsException` is thrown.

Requires permission to access the [CreateBillingGroup](#) action.

## Request Syntax

```
POST /billing-groups/billingGroupName HTTP/1.1  
Content-type: application/json
```

```
{  
  "billingGroupProperties": {  
    "billingGroupDescription": "string"  
  },  
  "tags": [  
    {  
      "Key": "string",  
      "Value": "string"  
    }  
  ]  
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [billingGroupName](#)

The name you wish to give to the billing group.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### billingGroupProperties

The properties of the billing group.

Type: [BillingGroupProperties](#) object

Required: No

### tags

Metadata which can be used to manage the billing group.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "billingGroupArn": "string",
  "billingGroupId": "string",
  "billingGroupName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### billingGroupArn

The ARN of the billing group.

Type: String

### **billingGroupId**

The ID of the billing group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\ - ]+

### **billingGroupName**

The name you gave to the billing group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_ - ]+

## **Errors**

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

## CreateCertificateFromCsr

Service: Amazon IoT

Creates an X.509 certificate using the specified certificate signing request.

Requires permission to access the [CreateCertificateFromCsr](#) action.

### Note

The CSR must include a public key that is either an RSA key with a length of at least 2048 bits or an ECC key from NIST P-256, NIST P-384, or NIST P-521 curves. For supported certificates, consult [Certificate signing algorithms supported by Amazon IoT](#).

### Note

Reusing the same certificate signing request (CSR) results in a distinct certificate.

You can create multiple certificates in a batch by creating a directory, copying multiple `.csr` files into that directory, and then specifying that directory on the command line. The following commands show how to create a batch of certificates given a batch of CSRs. In the following commands, we assume that a set of CSRs are located inside of the directory `my-csr-directory`:

On Linux and OS X, the command is:

```
$ ls my-csr-directory/ | xargs -I {} aws iot create-certificate-from-csr --  
certificate-signing-request file://my-csr-directory/{}
```

This command lists all of the CSRs in `my-csr-directory` and pipes each CSR file name to the `aws iot create-certificate-from-csr` Amazon CLI command to create a certificate for the corresponding CSR.

You can also run the `aws iot create-certificate-from-csr` part of the command in parallel to speed up the certificate creation process:

```
$ ls my-csr-directory/ | xargs -P 10 -I {} aws iot create-certificate-from-  
csr --certificate-signing-request file://my-csr-directory/{}
```

On Windows PowerShell, the command to create certificates for all CSRs in `my-csr-directory` is:

```
> ls -Name my-csr-directory | %{aws iot create-certificate-from-csr --  
certificate-signing-request file://my-csr-directory/$_}
```

On a Windows command prompt, the command to create certificates for all CSRs in my-csr-directory is:

```
> forfiles /p my-csr-directory /c "cmd /c aws iot create-certificate-from-  
csr --certificate-signing-request file://@path"
```

## Request Syntax

```
POST /certificates?setAsActive=setAsActive HTTP/1.1  
Content-type: application/json
```

```
{  
  "certificateSigningRequest": "string"  
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [setAsActive](#)

Specifies whether the certificate is active.

## Request Body

The request accepts the following data in JSON format.

### [certificateSigningRequest](#)

The certificate signing request (CSR).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[\s\S]*`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificateArn": "string",
  "certificateId": "string",
  "certificatePem": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificateArn

The Amazon Resource Name (ARN) of the certificate. You can use the ARN as a principal for policy operations.

Type: String

### certificateId

The ID of the certificate. Certificate management operations only take a certificateId.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

### certificatePem

The certificate data, in PEM format.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65536.

Pattern: [\\s\\S]\*



## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateCertificateProvider

Service: Amazon IoT

Creates an Amazon IoT Core certificate provider. You can use Amazon IoT Core certificate provider to customize how to sign a certificate signing request (CSR) in Amazon IoT fleet provisioning. For more information, see [Customizing certificate signing using Amazon IoT Core certificate provider](#) from *Amazon IoT Core Developer Guide*.

Requires permission to access the [CreateCertificateProvider](#) action.

## Important

After you create a certificate provider, the behavior of [CreateCertificateFromCsr API for fleet provisioning](#) will change and all API calls to `CreateCertificateFromCsr` will invoke the certificate provider to create the certificates. It can take up to a few minutes for this behavior to change after a certificate provider is created.

## Request Syntax

```
POST /certificate-providers/certificateProviderName HTTP/1.1
Content-type: application/json
```

```
{
  "accountDefaultForOperations": [ "string" ],
  "clientToken": "string",
  "lambdaFunctionArn": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### certificateProviderName

The name of the certificate provider.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### accountDefaultForOperations

A list of the operations that the certificate provider will use to generate certificates. Valid value: `CreateCertificateFromCsr`.

Type: Array of strings

Array Members: Fixed number of 1 item.

Valid Values: `CreateCertificateFromCsr`

Required: Yes

### clientToken

A string that you can optionally pass in the `CreateCertificateProvider` request to make sure the request is idempotent.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

### lambdaFunctionArn

The ARN of the Lambda function that defines the authentication logic.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `[\s\S]*`

Required: Yes

### tags

Metadata which can be used to manage the certificate provider.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificateProviderArn": "string",
  "certificateProviderName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificateProviderArn

The ARN of the certificate provider.

Type: String

Length Constraints: Maximum length of 2048.

### certificateProviderName

The name of the certificate provider.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=, @- ]+`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

## HTTP Status Code: 401

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateCommand

Service: Amazon IoT

Creates a command. A command contains reusable configurations that can be applied before they are sent to the devices.

## Request Syntax

```
PUT /commands/commandId HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "description": "string",
  "displayName": "string",
  "mandatoryParameters": [
    {
      "defaultValue": {
        "B": boolean,
        "BIN": blob,
        "D": number,
        "I": number,
        "L": number,
        "S": "string",
        "UL": "string"
      },
      "description": "string",
      "name": "string",
      "value": {
        "B": boolean,
        "BIN": blob,
        "D": number,
        "I": number,
        "L": number,
        "S": "string",
        "UL": "string"
      }
    }
  ],
  "namespace": "string",
  "payload": {
    "content": blob,
    "contentType": "string"
  },
}
```



```
"roleArn": "string",  
"tags": [  
  {  
    "Key": "string",  
    "Value": "string"  
  }  
]  
}
```

## URI Request Parameters

The request uses the following URI parameters.

### commandId

A unique identifier for the command. We recommend using UUID. Alpha-numeric characters, hyphens, and underscores are valid for use here.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### description

A short text decription of the command.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]\*

Required: No

### displayName

The user-friendly name in the console for the command. This name doesn't have to be unique. You can update the user-friendly name after you define it.

Type: String

Length Constraints: Maximum length of 64.

Pattern: [^\p{C}]\*

Required: No

### mandatoryParameters

A list of parameters that are required by the `StartCommandExecution` API. These parameters need to be specified only when using the `AWS-IoT-FleetWise` namespace. You can either specify them here or when running the command using the `StartCommandExecution` API.

Type: Array of [CommandParameter](#) objects

Array Members: Minimum number of 1 item.

Required: No

### namespace

The namespace of the command. The MQTT reserved topics and validations will be used for command executions according to the namespace setting.

Type: String

Valid Values: `AWS-IoT` | `AWS-IoT-FleetWise`

Required: No

### payload

The payload object for the command. You must specify this information when using the `AWS-IoT` namespace.

You can upload a static payload file from your local storage that contains the instructions for the device to process. The payload file can use any format. To make sure that the device correctly interprets the payload, we recommend you to specify the payload content type.

Type: [CommandPayload](#) object

Required: No

## roleArn

The IAM role that you must provide when using the `AWS-IoT-FleetWise` namespace. The role grants IoT Device Management the permission to access IoT FleetWise resources for generating the payload for the command. This field is not required when you use the `AWS-IoT` namespace.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

## tags

Name-value pairs that are used as metadata to manage a command.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "commandArn": "string",
  "commandId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### commandArn

The Amazon Resource Number (ARN) of the command. For example, `arn:aws:iot:<region>:<accountid>:command/<commandId>`

Type: String

## **commandId**

The unique identifier for the command.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

## **Errors**

### **ConflictException**

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### **InternalServerError**

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### **ServiceQuotaExceededException**

Service quota has been exceeded.

HTTP Status Code: 402

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **ValidationException**

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateCustomMetric

Service: Amazon IoT

Use this API to define a Custom Metric published by your devices to Device Defender.

Requires permission to access the [CreateCustomMetric](#) action.

## Request Syntax

```
POST /custom-metric/metricName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "clientRequestToken": "string",
  "displayName": "string",
  "metricType": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [metricName](#)

The name of the custom metric. This will be used in the metric report submitted from the device/thing. The name can't begin with `aws:`. You can't change the name after you define it.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9: _- ]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

## clientRequestToken

Each custom metric must have a unique client request token. If you try to create a new custom metric that already exists with a different token, an exception occurs. If you omit this value, Amazon SDKs will automatically generate a unique client request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9-_]+$`

Required: Yes

## displayName

The friendly name in the console for the custom metric. This name doesn't have to be unique. Don't use this name as the metric identifier in the device metric report. You can update the friendly name after you define it.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\p{Graph}\x20]*`

Required: No

## metricType

The type of the custom metric.

### **Important**

The type `number` only takes a single metric value as an input, but when you submit the metrics value in the DeviceMetrics report, you must pass it as an array with a single value.

Type: String

Valid Values: `string-list | ip-address-list | number-list | number`

Required: Yes

### tags

Metadata that can be used to manage the custom metric.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "metricArn": "string",
  "metricName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### metricArn

The Amazon Resource Number (ARN) of the custom metric. For example, `arn:aws-partition:iot:region:accountId:custommetric/metricName`

Type: String

### metricName

The name of the custom metric to be used in the metric report.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`



## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateDimension

Service: Amazon IoT

Create a dimension that you can use to limit the scope of a metric used in a security profile for Amazon IoT Device Defender. For example, using a `TOPIC_FILTER` dimension, you can narrow down the scope of the metric only to MQTT topics whose name match the pattern specified in the dimension.

Requires permission to access the [CreateDimension](#) action.

## Request Syntax

```
POST /dimensions/name HTTP/1.1
Content-type: application/json

{
  "clientRequestToken": "string",
  "stringValue": [ "string" ],
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "type": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [name](#)

A unique identifier for the dimension. Choose something that describes the type and value to make it easy to remember what it does.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### clientRequestToken

Each dimension must have a unique client request token. If you try to create a new dimension with the same token as a dimension that already exists, an exception occurs. If you omit this value, Amazon SDKs will automatically generate a unique client request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9-_$]`

Required: Yes

### stringValues

Specifies the value or list of values for the dimension. For TOPIC\_FILTER dimensions, this is a pattern used to match the MQTT topic (for example, "admin/#").

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

### tags

Metadata that can be used to manage the dimension.

Type: Array of [Tag](#) objects

Required: No

### type

Specifies the type of dimension. Supported types: TOPIC\_FILTER.

Type: String

Valid Values: TOPIC\_FILTER

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "arn": "string",
  "name": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### arn

The Amazon Resource Name (ARN) of the created dimension.

Type: String

### name

A unique identifier for the dimension.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# CreateDomainConfiguration

Service: Amazon IoT

Creates a domain configuration.

Requires permission to access the [CreateDomainConfiguration](#) action.

## Request Syntax

```
POST /domainConfigurations/domainConfigurationName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "applicationProtocol": "string",
  "authenticationType": "string",
  "authorizerConfig": {
    "allowAuthorizerOverride": boolean,
    "defaultAuthorizerName": "string"
  },
  "clientCertificateConfig": {
    "clientCertificateCallbackArn": "string"
  },
  "domainName": "string",
  "serverCertificateArns": [ "string" ],
  "serverCertificateConfig": {
    "enableOCSPCheck": boolean,
    "ocspAuthorizedResponderArn": "string",
    "ocspLambdaArn": "string"
  },
  "serviceType": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "tlsConfig": {
    "securityPolicy": "string"
  },
  "validationCertificateArn": "string"
}
```



## URI Request Parameters

The request uses the following URI parameters.

### domainConfigurationName

The name of the domain configuration. This value must be unique to a region.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w . - ]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### applicationProtocol

An enumerated string that specifies the application-layer protocol.

- SECURE\_MQTT - MQTT over TLS.
- MQTT\_WSS - MQTT over WebSocket.
- HTTPS - HTTP over TLS.
- DEFAULT - Use a combination of port and Application Layer Protocol Negotiation (ALPN) to specify application\_layer protocol. For more information, see [Device communication protocols](#).

Type: String

Valid Values: SECURE\_MQTT | MQTT\_WSS | HTTPS | DEFAULT

Required: No

### authenticationType

An enumerated string that specifies the authentication type.

- CUSTOM\_AUTH\_X509 - Use custom authentication and authorization with additional details from the X.509 client certificate.

- CUSTOM\_AUTH - Use custom authentication and authorization. For more information, see [Custom authentication and authorization](#).
- AWS\_X509 - Use X.509 client certificates without custom authentication and authorization. For more information, see [X.509 client certificates](#).
- AWS\_SIGV4 - Use Amazon Signature Version 4. For more information, see [IAM users, groups, and roles](#).
- DEFAULT - Use a combination of port and Application Layer Protocol Negotiation (ALPN) to specify authentication type. For more information, see [Device communication protocols](#).

Type: String

Valid Values: CUSTOM\_AUTH\_X509 | CUSTOM\_AUTH | AWS\_X509 | AWS\_SIGV4 | DEFAULT

Required: No

### [authorizerConfig](#)

An object that specifies the authorization service for a domain.

Type: [AuthorizerConfig](#) object

Required: No

### [clientCertificateConfig](#)

An object that specifies the client certificate configuration for a domain.

Type: [ClientCertificateConfig](#) object

Required: No

### [domainName](#)

The name of the domain.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 253.

Pattern: `[\s\S]*`

Required: No

## serverCertificateArns

The ARNs of the certificates that Amazon IoT passes to the device during the TLS handshake. Currently you can specify only one certificate ARN. This value is not required for Amazon-managed domains.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:aws(-cn|-us-gov|-iso-b|-iso)?:acm:[a-z]{2}-(gov-|iso-|isob-)?[a-z]{4,9}-\d{1}:\d{12}:certificate/[a-zA-Z0-9/-]+`

Required: No

## serverCertificateConfig

The server certificate configuration.

Type: [ServerCertificateConfig](#) object

Required: No

## serviceType

The type of service delivered by the endpoint.

### Note

Amazon IoT Core currently supports only the DATA service type.

Type: String

Valid Values: DATA | CREDENTIAL\_PROVIDER | JOBS

Required: No

## tags

Metadata which can be used to manage the domain configuration.

**Note**

For URI Request parameters use format: ...key1=value1&key2=value2...

For the CLI command-line parameter use format: &&tags "key1=value1&key2=value2..."

For the cli-input-json file use format: "tags": "key1=value1&key2=value2..."

Type: Array of [Tag](#) objects

Required: No

**[tlsConfig](#)**

An object that specifies the TLS configuration for a domain.

Type: [TlsConfig](#) object

Required: No

**[validationCertificateArn](#)**

The certificate used to validate the server certificate and prove domain name ownership.

This certificate must be signed by a public certificate authority. This value is not required for Amazon-managed domains.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: arn:aws(-cn|-us-gov|-iso-b|-iso)?:acm:[a-z]{2}-(gov-|iso-|isob-)?[a-z]{4,9}-\d{1}:\d{12}:certificate/[a-zA-Z0-9/-]+

Required: No

**Response Syntax**

```
HTTP/1.1 200
```

```
Content-type: application/json
```

```
{  
  "domainConfigurationArn": "string",  
  "domainConfigurationName": "string"
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### domainConfigurationArn

The ARN of the domain configuration.

Type: String

### domainConfigurationName

The name of the domain configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w. - ]+`

## Errors

### **CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

## **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

## **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)

- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateDynamicThingGroup

Service: Amazon IoT

Creates a dynamic thing group.

Requires permission to access the [CreateDynamicThingGroup](#) action.

## Request Syntax

```
POST /dynamic-thing-groups/thingGroupName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "indexName": "string",
  "queryString": "string",
  "queryVersion": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "thingGroupProperties": {
    "attributePayload": {
      "attributes": {
        "string" : "string"
      },
      "merge": boolean
    },
    "thingGroupDescription": "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### thingGroupName

The dynamic thing group name to create.

Length Constraints: Minimum length of 1. Maximum length of 128.



Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### indexName

The dynamic thing group index name.

#### Note

Currently one index is supported: AWS\_Things.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### queryString

The dynamic thing group search query string.

See [Query Syntax](#) for information about query string syntax.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### queryVersion

The dynamic thing group query version.

**Note**

Currently one query version is supported: "2017-09-30". If not specified, the query version defaults to this value.

Type: String

Required: No

**tags**

Metadata which can be used to manage the dynamic thing group.

Type: Array of [Tag](#) objects

Required: No

**thingGroupProperties**

The dynamic thing group properties.

Type: [ThingGroupProperties](#) object

Required: No

**Response Syntax**

```
HTTP/1.1 200
Content-type: application/json

{
  "indexName": "string",
  "queryString": "string",
  "queryVersion": "string",
  "thingGroupArn": "string",
  "thingGroupId": "string",
  "thingGroupName": "string"
}
```

**Response Elements**

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### indexName

The dynamic thing group index name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### queryString

The dynamic thing group search query string.

Type: String

Length Constraints: Minimum length of 1.

### queryVersion

The dynamic thing group query version.

Type: String

### thingGroupArn

The dynamic thing group ARN.

Type: String

### thingGroupId

The dynamic thing group ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\ -]+

### thingGroupName

The dynamic thing group name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidQueryException**

The query is invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateFleetMetric

Service: Amazon IoT

Creates a fleet metric.

Requires permission to access the [CreateFleetMetric](#) action.

## Request Syntax

```
PUT /fleet-metric/metricName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "aggregationField": "string",
  "aggregationType": {
    "name": "string",
    "values": [ "string" ]
  },
  "description": "string",
  "indexName": "string",
  "period": number,
  "queryString": "string",
  "queryVersion": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "unit": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### metricName

The name of the fleet metric to create.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_\-\. ]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### aggregationField

The field to aggregate.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### aggregationType

The type of the aggregation query.

Type: [AggregationType](#) object

Required: Yes

### description

The fleet metric description.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `[\p{Graph}\x20]*`

Required: No

### indexName

The name of the index to search.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### period

The time in seconds between fleet metric emissions. Range [60(1 min), 86400(1 day)] and must be multiple of 60.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 86400.

Required: Yes

### queryString

The search query string.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### queryVersion

The query version.

Type: String

Required: No

### tags

Metadata, which can be used to manage the fleet metric.

Type: Array of [Tag](#) objects

Required: No

### unit

Used to support unit transformation such as milliseconds to seconds. The unit must be supported by [CW metric](#). Default to null.



Type: String

Valid Values: Seconds | Microseconds | Milliseconds | Bytes | Kilobytes | Megabytes | Gigabytes | Terabytes | Bits | Kilobits | Megabits | Gigabits | Terabits | Percent | Count | Bytes/Second | Kilobytes/Second | Megabytes/Second | Gigabytes/Second | Terabytes/Second | Bits/Second | Kilobits/Second | Megabits/Second | Gigabits/Second | Terabits/Second | Count/Second | None

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "metricArn": "string",
  "metricName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### metricArn

The Amazon Resource Name (ARN) of the new fleet metric.

Type: String

### metricName

The name of the fleet metric to create.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_\-\. ]+

## Errors

### **IndexNotReadyException**

The index is not ready.

HTTP Status Code: 400

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidAggregationException**

The aggregation is invalid.

HTTP Status Code: 400

### **InvalidQueryException**

The query is invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateJob

Service: Amazon IoT

Creates a job.

Requires permission to access the [CreateJob](#) action.

## Request Syntax

```
PUT /jobs/jobId HTTP/1.1
Content-type: application/json

{
  "abortConfig": {
    "criteriaList": [
      {
        "action": "string",
        "failureType": "string",
        "minNumberOfExecutedThings": number,
        "thresholdPercentage": number
      }
    ]
  },
  "description": "string",
  "destinationPackageVersions": [ "string" ],
  "document": "string",
  "documentParameters": {
    "string" : "string"
  },
  "documentSource": "string",
  "jobExecutionsRetryConfig": {
    "criteriaList": [
      {
        "failureType": "string",
        "numberOfRetries": number
      }
    ]
  },
  "jobExecutionsRolloutConfig": {
    "exponentialRate": {
      "baseRatePerMinute": number,
      "incrementFactor": number,
      "rateIncreaseCriteria": {
```

```
        "numberOfNotifiedThings": number,
        "numberOfSucceededThings": number
    }
},
"maximumPerMinute": number
},
"jobTemplateArn": "string",
"namespaceId": "string",
"presignedUrlConfig": {
    "expiresInSec": number,
    "roleArn": "string"
},
"schedulingConfig": {
    "endBehavior": "string",
    "endTime": "string",
    "maintenanceWindows": [
        {
            "durationInMinutes": number,
            "startTime": "string"
        }
    ],
    "startTime": "string"
},
"tags": [
    {
        "Key": "string",
        "Value": "string"
    }
],
"targets": [ "string" ],
"targetSelection": "string",
"timeoutConfig": {
    "inProgressTimeoutInMinutes": number
}
}
```

## URI Request Parameters

The request uses the following URI parameters.

## jobId

A job identifier which must be unique for your account. We recommend using a UUID. Alpha-numeric characters, "-" and "\_" are valid for use here.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### abortConfig

Allows you to create the criteria to abort a job.

Type: [AbortConfig](#) object

Required: No

### description

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

Required: No

### destinationPackageVersions

The package version Amazon Resource Names (ARNs) that are installed on the device when the job successfully completes. The package version must be in either the Published or Deprecated state when the job deploys. For more information, see [Package version lifecycle](#).

**Note:**The following Length Constraints relates to a single ARN. Up to 25 package version ARNs are allowed.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^ain:[!-~]+$`

Required: No

### document

The job document. Required if you don't specify a value for `documentSource`.

Type: String

Length Constraints: Maximum length of 32768.

Required: No

### documentParameters

Parameters of an Amazon managed template that you can specify to create the job document.

#### **Note**

`documentParameters` can only be used when creating jobs from Amazon managed templates. This parameter can't be used with custom job templates or to create jobs from them.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `[a-zA-Z0-9_-]+`

Value Length Constraints: Minimum length of 1. Maximum length of 30720.

Value Pattern: `[^\p{C}]+`

Required: No

### documentSource

An S3 link, or S3 object URL, to the job document. The link is an Amazon S3 object URL and is required if you don't specify a value for `document`.

For example, `--document-source https://s3.region-code.amazonaws.com/example-firmware/device-firmware.1.0`

For more information, see [Methods for accessing a bucket](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1350.

Required: No

### **jobExecutionsRetryConfig**

Allows you to create the criteria to retry a job.

Type: [JobExecutionsRetryConfig](#) object

Required: No

### **jobExecutionsRolloutConfig**

Allows you to create a staged rollout of the job.

Type: [JobExecutionsRolloutConfig](#) object

Required: No

### **jobTemplateArn**

The ARN of the job template used to create the job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

Required: No

### **namespaceId**

The namespace used to indicate that a job is a customer-managed job.

When you specify a value for this parameter, Amazon IoT Core sends jobs notifications to MQTT topics that contain the value in the following format.



`$aws/things/THING_NAME/jobs/JOB_ID/notify-namespace-NAMESPACE_ID/`

**Note**

The namespaceId feature is only supported by Amazon IoT Greengrass at this time. For more information, see [Setting up Amazon IoT Greengrass core devices](#).

Type: String

Pattern: `[a-zA-Z0-9_-]+`

Required: No

### presignedUrlConfig

Configuration information for pre-signed S3 URLs.

Type: [PresignedUrlConfig](#) object

Required: No

### schedulingConfig

The configuration that allows you to schedule a job for a future date and time in addition to specifying the end behavior for each job execution.

Type: [SchedulingConfig](#) object

Required: No

### tags

Metadata which can be used to manage the job.

Type: Array of [Tag](#) objects

Required: No

### targets

A list of things and thing groups to which the job should be sent.

Type: Array of strings

Array Members: Minimum number of 1 item.

Length Constraints: Maximum length of 2048.

Required: Yes

### targetSelection

Specifies whether the job will continue to run (CONTINUOUS), or will be complete after all those things specified as targets have completed the job (SNAPSHOT). If continuous, the job may also be run on a thing when a change is detected in a target. For example, a job will run on a thing when the thing is added to a target group, even after the job was completed by all things originally in the group.

#### Note

We recommend that you use continuous jobs instead of snapshot jobs for dynamic thing group targets. By using continuous jobs, devices that join the group receive the job execution even after the job has been created.

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

Required: No

### timeoutConfig

Specifies the amount of time each device has to finish its execution of the job. The timer is started when the job execution status is set to IN\_PROGRESS. If the job execution status is not set to another terminal state before the time expires, it will be automatically set to TIMED\_OUT.

Type: [TimeoutConfig](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "description": "string",
  "jobArn": "string",
  "jobId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### description

The job description.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

### jobArn

The job ARN.

Type: String

### jobId

The unique identifier you assigned to this job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

## Errors

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateJobTemplate

Service: Amazon IoT

Creates a job template.

Requires permission to access the [CreateJobTemplate](#) action.

## Request Syntax

```
PUT /job-templates/jobTemplateId HTTP/1.1
Content-type: application/json

{
  "abortConfig": {
    "criteriaList": [
      {
        "action": "string",
        "failureType": "string",
        "minNumberOfExecutedThings": number,
        "thresholdPercentage": number
      }
    ]
  },
  "description": "string",
  "destinationPackageVersions": [ "string" ],
  "document": "string",
  "documentSource": "string",
  "jobArn": "string",
  "jobExecutionsRetryConfig": {
    "criteriaList": [
      {
        "failureType": "string",
        "numberOfRetries": number
      }
    ]
  },
  "jobExecutionsRolloutConfig": {
    "exponentialRate": {
      "baseRatePerMinute": number,
      "incrementFactor": number,
      "rateIncreaseCriteria": {
        "numberOfNotifiedThings": number,
        "numberOfSucceededThings": number
      }
    }
  }
}
```

```
    }
  },
  "maximumPerMinute": number
},
"maintenanceWindows": [
  {
    "durationInMinutes": number,
    "startTime": "string"
  }
],
"presignedUrlConfig": {
  "expiresInSec": number,
  "roleArn": "string"
},
"tags": [
  {
    "Key": "string",
    "Value": "string"
  }
],
"timeoutConfig": {
  "inProgressTimeoutInMinutes": number
}
}
```

## URI Request Parameters

The request uses the following URI parameters.

### jobTemplateId

A unique identifier for the job template. We recommend using a UUID. Alpha-numeric characters, "-", and "\_" are valid for use here.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

## abortConfig

The criteria that determine when and how a job abort takes place.

Type: [AbortConfig](#) object

Required: No

## description

A description of the job document.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: Yes

## destinationPackageVersions

The package version Amazon Resource Names (ARNs) that are installed on the device when the job successfully completes. The package version must be in either the Published or Deprecated state when the job deploys. For more information, see [Package version lifecycle](#).

**Note:**The following Length Constraints relates to a single ARN. Up to 25 package version ARNs are allowed.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

Required: No

## document

The job document. Required if you don't specify a value for `documentSource`.

Type: String

Length Constraints: Maximum length of 32768.

Required: No



## documentSource

An S3 link, or S3 object URL, to the job document. The link is an Amazon S3 object URL and is required if you don't specify a value for document.

For example, `--document-source https://s3.region-code.amazonaws.com/example-firmware/device-firmware.1.0`

For more information, see [Methods for accessing a bucket](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1350.

Required: No

## jobArn

The ARN of the job to use as the basis for the job template.

Type: String

Required: No

## jobExecutionsRetryConfig

Allows you to create the criteria to retry a job.

Type: [JobExecutionsRetryConfig](#) object

Required: No

## jobExecutionsRolloutConfig

Allows you to create a staged rollout of a job.

Type: [JobExecutionsRolloutConfig](#) object

Required: No

## maintenanceWindows

Allows you to configure an optional maintenance window for the rollout of a job document to all devices in the target group for a job.

Type: Array of [MaintenanceWindow](#) objects

Required: No

### [presignedUrlConfig](#)

Configuration for pre-signed S3 URLs.

Type: [PresignedUrlConfig](#) object

Required: No

### [tags](#)

Metadata that can be used to manage the job template.

Type: Array of [Tag](#) objects

Required: No

### [timeoutConfig](#)

Specifies the amount of time each device has to finish its execution of the job. A timer is started when the job execution status is set to IN\_PROGRESS. If the job execution status is not set to another terminal state before the timer expires, it will be automatically set to TIMED\_OUT.

Type: [TimeoutConfig](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "jobTemplateArn": "string",
  "jobTemplateId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## jobTemplateArn

The ARN of the job template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

## jobTemplateId

The unique identifier of the job template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9_-]+`

## Errors

### **ConflictException**

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateKeysAndCertificate

Service: Amazon IoT

Creates a 2048-bit RSA key pair and issues an X.509 certificate using the issued public key. You can also call `CreateKeysAndCertificate` over MQTT from a device, for more information, see [Provisioning MQTT API](#).

**Note** This is the only time Amazon IoT issues the private key for this certificate, so it is important to keep it in a secure location.

Requires permission to access the [CreateKeysAndCertificate](#) action.

## Request Syntax

```
POST /keys-and-certificate?setAsActive=setAsActive HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [setAsActive](#)

Specifies whether the certificate is active.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificateArn": "string",
  "certificateId": "string",
  "certificatePem": "string",
  "keyPair": {
    "PrivateKey": "string",
    "PublicKey": "string"
  }
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificateArn

The ARN of the certificate.

Type: String

### certificateId

The ID of the certificate. Amazon IoT issues a default subject name for the certificate (for example, Amazon IoT Certificate).

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

### certificatePem

The certificate data, in PEM format.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65536.

Pattern: [\\s\\S]\*

### keyPair

The generated key pair.

Type: [KeyPair](#) object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)





# CreateMitigationAction

Service: Amazon IoT

Defines an action that can be applied to audit findings by using StartAuditMitigationActionsTask. Only certain types of mitigation actions can be applied to specific check names. For more information, see [Mitigation actions](#). Each mitigation action can apply only one type of change.

Requires permission to access the [CreateMitigationAction](#) action.

## Request Syntax

```
POST /mitigationactions/actions/actionName HTTP/1.1  
Content-type: application/json
```

```
{  
  "actionParams": {  
    "addThingsToThingGroupParams": {  
      "overrideDynamicGroups": boolean,  
      "thingGroupNames": [ "string" ]  
    },  
    "enableIoTLoggingParams": {  
      "logLevel": "string",  
      "roleArnForLogging": "string"  
    },  
    "publishFindingToSnsParams": {  
      "topicArn": "string"  
    },  
    "replaceDefaultPolicyVersionParams": {  
      "templateName": "string"  
    },  
    "updateCACertificateParams": {  
      "action": "string"  
    },  
    "updateDeviceCertificateParams": {  
      "action": "string"  
    }  
  },  
  "roleArn": "string",  
  "tags": [  
    {  
      "Key": "string",  
      "Value": "string"  
    }  
  ]  
}
```

```
]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### actionName

A friendly name for the action. Choose a friendly name that accurately describes the action (for example, `EnableLoggingAction`).

Length Constraints: Maximum length of 128.

Pattern: `[a-zA-Z0-9_-]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### actionParams

Defines the type of action and the parameters for that action.

Type: [MitigationActionParams](#) object

Required: Yes

### roleArn

The ARN of the IAM role that is used to apply the mitigation action.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

### tags

Metadata that can be used to manage the mitigation action.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "actionArn": "string",
  "actionId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [actionArn](#)

The ARN for the new mitigation action.

Type: String

### [actionId](#)

A unique identifier for the new mitigation action.

Type: String

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateOTAUpdate

Service: Amazon IoT

Creates an Amazon IoT OTA update on a target group of things or groups.

Requires permission to access the [CreateOTAUpdate](#) action.

## Request Syntax

```
POST /otaUpdates/otaUpdateId HTTP/1.1
Content-type: application/json

{
  "additionalParameters": {
    "string" : "string"
  },
  "awsJobAbortConfig": {
    "abortCriteriaList": [
      {
        "action": "string",
        "failureType": "string",
        "minNumberOfExecutedThings": number,
        "thresholdPercentage": number
      }
    ]
  },
  "awsJobExecutionsRolloutConfig": {
    "exponentialRate": {
      "baseRatePerMinute": number,
      "incrementFactor": number,
      "rateIncreaseCriteria": {
        "numberOfNotifiedThings": number,
        "numberOfSucceededThings": number
      }
    },
    "maximumPerMinute": number
  },
  "awsJobPresignedUrlConfig": {
    "expiresInSec": number
  },
  "awsJobTimeoutConfig": {
    "inProgressTimeoutInMinutes": number
  },
}
```

```
"description": "string",
"files": [
  {
    "attributes": {
      "string": "string"
    },
    "codeSigning": {
      "awsSignerJobId": "string",
      "customCodeSigning": {
        "certificateChain": {
          "certificateName": "string",
          "inlineDocument": "string"
        },
        "hashAlgorithm": "string",
        "signature": {
          "inlineDocument": blob
        },
        "signatureAlgorithm": "string"
      },
      "startSigningJobParameter": {
        "destination": {
          "s3Destination": {
            "bucket": "string",
            "prefix": "string"
          }
        },
        "signingProfileName": "string",
        "signingProfileParameter": {
          "certificateArn": "string",
          "certificatePathOnDevice": "string",
          "platform": "string"
        }
      }
    },
    "fileLocation": {
      "s3Location": {
        "bucket": "string",
        "key": "string",
        "version": "string"
      },
      "stream": {
        "fileId": number,
        "streamId": "string"
      }
    }
  }
]
```

```
    },
    "fileName": "string",
    "fileType": number,
    "fileVersion": "string"
  }
],
"protocols": [ "string" ],
"roleArn": "string",
"tags": [
  {
    "Key": "string",
    "Value": "string"
  }
],
"targets": [ "string" ],
"targetSelection": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### otaUpdateId

The ID of the OTA update to be created.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### additionalParameters

A list of additional OTA update parameters, which are name-value pairs. They won't be sent to devices as a part of the Job document.

Type: String to string map

Value Length Constraints: Minimum length of 0. Maximum length of 4096.

Value Pattern: `[\s\S]*`

Required: No

### [awsJobAbortConfig](#)

The criteria that determine when and how a job abort takes place.

Type: [AwsJobAbortConfig](#) object

Required: No

### [awsJobExecutionsRolloutConfig](#)

Configuration for the rollout of OTA updates.

Type: [AwsJobExecutionsRolloutConfig](#) object

Required: No

### [awsJobPresignedUrlConfig](#)

Configuration information for pre-signed URLs.

Type: [AwsJobPresignedUrlConfig](#) object

Required: No

### [awsJobTimeoutConfig](#)

Specifies the amount of time each device has to finish its execution of the job. A timer is started when the job execution status is set to `IN_PROGRESS`. If the job execution status is not set to another terminal state before the timer expires, it will be automatically set to `TIMED_OUT`.

Type: [AwsJobTimeoutConfig](#) object

Required: No

### [description](#)

The description of the OTA update.

Type: String

Length Constraints: Maximum length of 2028.



Pattern: `[^\p{C}]+`

Required: No

### files

The files to be streamed by the OTA update.

Type: Array of [OTAUpdateFile](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

### protocols

The protocol used to transfer the OTA update image. Valid values are [HTTP], [MQTT], [HTTP, MQTT]. When both HTTP and MQTT are specified, the target device can choose the protocol.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 2 items.

Valid Values: MQTT | HTTP

Required: No

### roleArn

The IAM role that grants Amazon IoT Core access to the Amazon S3, Amazon IoT jobs and Amazon Code Signing resources to create an OTA update job.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

### tags

Metadata which can be used to manage updates.

Type: Array of [Tag](#) objects

Required: No

## targets

The devices targeted to receive OTA updates.

Type: Array of strings

Array Members: Minimum number of 1 item.

Required: Yes

## targetSelection

Specifies whether the update will continue to run (CONTINUOUS), or will be complete after all the things specified as targets have completed the update (SNAPSHOT). If continuous, the update may also be run on a thing when a change is detected in a target. For example, an update will run on a thing when the thing is added to a target group, even after the update was completed by all things originally in the group. Valid values: CONTINUOUS | SNAPSHOT.

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "awsIotJobArn": "string",
  "awsIotJobId": "string",
  "otaUpdateArn": "string",
  "otaUpdateId": "string",
  "otaUpdateStatus": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### awsIotJobArn

The Amazon IoT job ARN associated with the OTA update.

Type: String

### awsIotJobId

The Amazon IoT job ID associated with the OTA update.

Type: String

### otaUpdateArn

The OTA update ARN.

Type: String

### otaUpdateId

The OTA update ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

### otaUpdateStatus

The OTA update status.

Type: String

Valid Values: CREATE\_PENDING | CREATE\_IN\_PROGRESS | CREATE\_COMPLETE |  
CREATE\_FAILED | DELETE\_IN\_PROGRESS | DELETE\_FAILED

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

## **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

## **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

## **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

## **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreatePackage

Service: Amazon IoT

Creates an Amazon IoT software package that can be deployed to your fleet.

Requires permission to access the [CreatePackage](#) and [GetIndexingConfiguration](#) actions.

## Request Syntax

```
PUT /packages/packageName?clientToken=clientToken HTTP/1.1
Content-type: application/json

{
  "description": "string",
  "tags": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [clientToken](#)

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

### [packageName](#)

The name of the new software package.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_.]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### description

A summary of the package being created. This can be used to outline the package's contents or purpose.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[^\p{C}]+`

Required: No

### tags

Metadata that can be used to manage the package.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `^([\p{L}\p{Z}\p{N}_ . :/+\\-@]*)$`

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "description": "string",
  "packageArn": "string",
  "packageName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### description

The package description.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [^\p{C}]+

### packageArn

The Amazon Resource Name (ARN) for the package.

Type: String

### packageName

The name of the software package.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.]+

## Errors

### **ConflictException**

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### **InternalServerErrorException**

Internal error from the service that indicates an unexpected error or that the service is unavailable.



HTTP Status Code: 500

### **ServiceQuotaExceededException**

Service quota has been exceeded.

HTTP Status Code: 402

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **ValidationException**

The request is not valid.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreatePackageVersion

Service: Amazon IoT

Creates a new version for an existing Amazon IoT software package.

Requires permission to access the [CreatePackageVersion](#) and [GetIndexingConfiguration](#) actions.

## Request Syntax

```
PUT /packages/packageName/versions/versionName?clientToken=clientToken HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "artifact": {
    "s3Location": {
      "bucket": "string",
      "key": "string",
      "version": "string"
    }
  },
  "attributes": {
    "string" : "string"
  },
  "description": "string",
  "recipe": "string",
  "tags": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [clientToken](#)

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern:  $\backslash S\{36, 64\}$

## packageName

The name of the associated software package.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.]+

Required: Yes

## versionName

The name of the new package version.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_.]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### artifact

The various build components created during the build process such as libraries and configuration files that make up a software package version.

Type: [PackageVersionArtifact](#) object

Required: No

### attributes

Metadata that can be used to define a package version's configuration. For example, the S3 file location, configuration options that are being sent to the device or fleet.

The combined size of all the attributes on a package version is limited to 3KB.

Type: String to string map

Key Length Constraints: Minimum length of 1.

Key Pattern: `[a-zA-Z0-9:_-]+`

Value Length Constraints: Minimum length of 1.

Value Pattern: `[\p{C}]+`

Required: No

### description

A summary of the package version being created. This can be used to outline the package's contents or purpose.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[\p{C}]+`

Required: No

### recipe

The inline job document associated with a software package version used for a quick job deployment.

Type: String

Length Constraints: Maximum length of 3072.

Required: No

### tags

Metadata that can be used to manage the package version.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `^([\p{L}\p{Z}\p{N}_ . : / = + \ - @] *)$`

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "attributes": {
    "string" : "string"
  },
  "description": "string",
  "errorReason": "string",
  "packageName": "string",
  "packageVersionArn": "string",
  "status": "string",
  "versionName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### attributes

Metadata that were added to the package version that can be used to define a package version's configuration.

Type: String to string map

Key Length Constraints: Minimum length of 1.

Key Pattern: [a-zA-Z0-9:\_-]+

Value Length Constraints: Minimum length of 1.

Value Pattern: [^\p{C}]+

### description

The package version description.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[^\p{C}]+`

### errorReason

Error reason for a package version failure during creation or update.

Type: String

### packageName

The name of the associated software package.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_. ]+`

### packageVersionArn

The Amazon Resource Name (ARN) for the package.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

### status

The status of the package version. For more information, see [Package version lifecycle](#).

Type: String

Valid Values: DRAFT | PUBLISHED | DEPRECATED

### versionName

The name of the new package version.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_.]+

## Errors

### ConflictException

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### InternalServerErrorException

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ServiceQuotaExceededException

Service quota has been exceeded.

HTTP Status Code: 402

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# CreatePolicy

Service: Amazon IoT

Creates an Amazon IoT policy.

The created policy is the default version for the policy. This operation creates a policy version with a version identifier of **1** and sets **1** as the policy's default version.

Requires permission to access the [CreatePolicy](#) action.

## Request Syntax

```
POST /policies/policyName HTTP/1.1
Content-type: application/json

{
  "policyDocument": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [policyName](#)

The policy name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

## policyDocument

The JSON document that describes the policy. **policyDocument** must have a minimum length of 1, with a maximum length of 2048, excluding whitespace.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 404600.

Pattern: `[\s\S]*`

Required: Yes

## tags

Metadata which can be used to manage the policy.

### Note

For URI Request parameters use format: `...key1=value1&key2=value2...`

For the CLI command-line parameter use format: `&&tags "key1=value1&key2=value2..."`

For the cli-input-json file use format: `"tags": "key1=value1&key2=value2..."`

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "policyArn": "string",
  "policyDocument": "string",
  "policyName": "string",
  "policyVersionId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### policyArn

The policy ARN.

Type: String

### policyDocument

The JSON document that describes the policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 404600.

Pattern: `[\s\S]*`

### policyName

The policy name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

### policyVersionId

The policy version ID.

Type: String

Pattern: `[0-9]+`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **MalformedPolicyException**

The policy documentation is not valid.

HTTP Status Code: 400

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreatePolicyVersion

Service: Amazon IoT

Creates a new version of the specified Amazon IoT policy. To update a policy, create a new policy version. A managed policy can have up to five versions. If the policy has five versions, you must use [DeletePolicyVersion](#) to delete an existing version before you create a new one.

Optionally, you can set the new version as the policy's default version. The default version is the operative version (that is, the version that is in effect for the certificates to which the policy is attached).

Requires permission to access the [CreatePolicyVersion](#) action.

## Request Syntax

```
POST /policies/policyName/version?setAsDefault=setAsDefault HTTP/1.1
Content-type: application/json

{
  "policyDocument": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [policyName](#)

The policy name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

### [setAsDefault](#)

Specifies whether the policy version is set as the default. When this parameter is true, the new policy version becomes the operative version (that is, the version that is in effect for the certificates to which the policy is attached).

## Request Body

The request accepts the following data in JSON format.

### policyDocument

The JSON document that describes the policy. Minimum length of 1. Maximum length of 2048, excluding whitespace.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 404600.

Pattern: `[\s\S]*`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "isDefaultVersion": boolean,
  "policyArn": "string",
  "policyDocument": "string",
  "policyVersionId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### isDefaultVersion

Specifies whether the policy version is the default.

Type: Boolean

### policyArn

The policy ARN.

Type: String

### policyDocument

The JSON document that describes the policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 404600.

Pattern: `[\s\S]*`

### policyVersionId

The policy version ID.

Type: String

Pattern: `[0-9]+`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **MalformedPolicyException**

The policy documentation is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404



## **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **VersionsLimitExceededException**

The number of policy versions exceeds the limit.

HTTP Status Code: 409

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateProvisioningClaim

Service: Amazon IoT

Creates a provisioning claim.

Requires permission to access the [CreateProvisioningClaim](#) action.

## Request Syntax

```
POST /provisioning-templates/templateName/provisioning-claim HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [templateName](#)

The name of the provisioning template to use.

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificateId": "string",
  "certificatePem": "string",
  "expiration": number,
  "keyPair": {
    "PrivateKey": "string",
    "PublicKey": "string"
  }
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificateId

The ID of the certificate.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

### certificatePem

The provisioning claim certificate.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65536.

Pattern: [\\s\\S]\*

### expiration

The provisioning claim expiration time.

Type: Timestamp

### keyPair

The provisioning claim key pair.

Type: [KeyPair](#) object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateProvisioningTemplate

Service: Amazon IoT

Creates a provisioning template.

Requires permission to access the [CreateProvisioningTemplate](#) action.

## Request Syntax

```
POST /provisioning-templates HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "description": "string",
  "enabled": boolean,
  "preProvisioningHook": {
    "payloadVersion": "string",
    "targetArn": "string"
  },
  "provisioningRoleArn": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "templateBody": "string",
  "templateName": "string",
  "type": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### description

The description of the provisioning template.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

Pattern: `[^\p{C}]*`

Required: No

### enabled

True to enable the provisioning template, otherwise false.

Type: Boolean

Required: No

### preProvisioningHook

Creates a pre-provisioning hook template. Only supports template of type FLEET\_PROVISIONING. For more information about provisioning template types, see [type](#).

Type: [ProvisioningHook](#) object

Required: No

### provisioningRoleArn

The role ARN for the role associated with the provisioning template. This IoT role grants permission to provision a device.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

### tags

Metadata which can be used to manage the provisioning template.

#### Note

For URI Request parameters use format: `...key1=value1&key2=value2...`

For the CLI command-line parameter use format: `&&tags "key1=value1&key2=value2..."`

For the cli-input-json file use format: `"tags": "key1=value1&key2=value2..."`

Type: Array of [Tag](#) objects

Required: No

### [templateBody](#)

The JSON formatted contents of the provisioning template.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 10240.

Pattern: `[\s\S]*`

Required: Yes

### [templateName](#)

The name of the provisioning template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

Required: Yes

### [type](#)

The type you define in a provisioning template. You can create a template with only one type. You can't change the template type after its creation. The default value is FLEET\_PROVISIONING. For more information about provisioning template, see: [Provisioning template](#).

Type: String

Valid Values: FLEET\_PROVISIONING | JITP

Required: No

## Response Syntax

```
HTTP/1.1 200
```



```
Content-type: application/json

{
  "defaultVersionId": number,
  "templateArn": "string",
  "templateName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### defaultVersionId

The default version of the provisioning template.

Type: Integer

### templateArn

The ARN that identifies the provisioning template.

Type: String

### templateName

The name of the provisioning template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

## **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

## **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

## **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)

- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateProvisioningTemplateVersion

Service: Amazon IoT

Creates a new version of a provisioning template.

Requires permission to access the [CreateProvisioningTemplateVersion](#) action.

## Request Syntax

```
POST /provisioning-templates/templateName/versions?setAsDefault=setAsDefault HTTP/1.1
Content-type: application/json
```

```
{
  "templateBody": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [setAsDefault](#)

Sets a fleet provision template version as the default version.

### [templateName](#)

The name of the provisioning template.

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [templateBody](#)

The JSON formatted contents of the provisioning template.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 10240.

Pattern: `[\s\S]*`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "isDefaultVersion": boolean,
  "templateArn": "string",
  "templateName": "string",
  "versionId": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### isDefaultVersion

True if the provisioning template version is the default version, otherwise false.

Type: Boolean

### templateArn

The ARN that identifies the provisioning template.

Type: String

### templateName

The name of the provisioning template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

### versionId

The version of the provisioning template.

Type: Integer

## Errors

### **ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

### **VersionsLimitExceededException**

The number of policy versions exceeds the limit.

HTTP Status Code: 409

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateRoleAlias

Service: Amazon IoT

Creates a role alias.

Requires permission to access the [CreateRoleAlias](#) action.

## Important

The value of [credentialDurationSeconds](#) must be less than or equal to the maximum session duration of the IAM role that the role alias references. For more information, see [Modifying a role maximum session duration \(Amazon API\)](#) from the Amazon Identity and Access Management User Guide.

## Request Syntax

```
POST /role-aliases/roleAlias HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "credentialDurationSeconds": number,
  "roleArn": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [roleAlias](#)

The role alias that points to a role ARN. This allows you to change the role without having to update the device.

Length Constraints: Minimum length of 1. Maximum length of 128.



Pattern: `[\w=, @- ]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### credentialDurationSeconds

How long (in seconds) the credentials will be valid. The default value is 3,600 seconds.

This value must be less than or equal to the maximum session duration of the IAM role that the role alias references.

Type: Integer

Valid Range: Minimum value of 900. Maximum value of 43200.

Required: No

### roleArn

The role ARN.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

### tags

Metadata which can be used to manage the role alias.

#### Note

For URI Request parameters use format: `...key1=value1&key2=value2...`

For the CLI command-line parameter use format: `&&tags "key1=value1&key2=value2..."`

For the cli-input-json file use format: `"tags": "key1=value1&key2=value2..."`

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "roleAlias": "string",
  "roleAliasArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [roleAlias](#)

The role alias.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=, @- ]+`

### [roleAliasArn](#)

The role alias ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateScheduledAudit

Service: Amazon IoT

Creates a scheduled audit that is run at a specified time interval.

Requires permission to access the [CreateScheduledAudit](#) action.

## Request Syntax

```
POST /audit/scheduledaudits/scheduledAuditName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "dayOfMonth": "string",
  "dayOfWeek": "string",
  "frequency": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "targetCheckNames": [ "string" ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [scheduledAuditName](#)

The name you want to give to the scheduled audit. (Max. 128 chars)

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

## dayOfMonth

The day of the month on which the scheduled audit takes place. This can be "1" through "31" or "LAST". This field is required if the "frequency" parameter is set to MONTHLY. If days 29 to 31 are specified, and the month doesn't have that many days, the audit takes place on the LAST day of the month.

Type: String

Pattern: `^([1-9]|[12][0-9]|3[01])$|^LAST$`

Required: No

## dayOfWeek

The day of the week on which the scheduled audit takes place, either SUN, MON, TUE, WED, THU, FRI, or SAT. This field is required if the frequency parameter is set to WEEKLY or BIWEEKLY.

Type: String

Valid Values: SUN | MON | TUE | WED | THU | FRI | SAT

Required: No

## frequency

How often the scheduled audit takes place, either DAILY, WEEKLY, BIWEEKLY or MONTHLY. The start time of each audit is determined by the system.

Type: String

Valid Values: DAILY | WEEKLY | BIWEEKLY | MONTHLY

Required: Yes

## tags

Metadata that can be used to manage the scheduled audit.

Type: Array of [Tag](#) objects

Required: No

## targetCheckNames

Which checks are performed during the scheduled audit. Checks must be enabled for your account. (Use `DescribeAccountAuditConfiguration` to see the list of all checks, including

those that are enabled or use `UpdateAccountAuditConfiguration` to select which checks are enabled.)

Type: Array of strings

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "scheduledAuditArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [scheduledAuditArn](#)

The ARN of the scheduled audit.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## LimitExceededException

A limit has been exceeded.

HTTP Status Code: 410

## ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# CreateSecurityProfile

Service: Amazon IoT

Creates a Device Defender security profile.

Requires permission to access the [CreateSecurityProfile](#) action.

## Request Syntax

```
POST /security-profiles/securityProfileName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "additionalMetricsToRetain": [ "string" ],
  "additionalMetricsToRetainV2": [
    {
      "exportMetric": boolean,
      "metric": "string",
      "metricDimension": {
        "dimensionName": "string",
        "operator": "string"
      }
    }
  ],
  "alertTargets": {
    "string" : {
      "alertTargetArn": "string",
      "roleArn": "string"
    }
  },
  "behaviors": [
    {
      "criteria": {
        "comparisonOperator": "string",
        "consecutiveDatapointsToAlarm": number,
        "consecutiveDatapointsToClear": number,
        "durationSeconds": number,
        "mlDetectionConfig": {
          "confidenceLevel": "string"
        },
        "statisticalThreshold": {
          "statistic": "string"
        }
      }
    }
  ]
}
```

```

    "value": {
      "cidrs": [ "string" ],
      "count": number,
      "number": number,
      "numbers": [ number ],
      "ports": [ number ],
      "strings": [ "string" ]
    }
  },
  "exportMetric": boolean,
  "metric": "string",
  "metricDimension": {
    "dimensionName": "string",
    "operator": "string"
  },
  "name": "string",
  "suppressAlerts": boolean
}
],
"metricsExportConfig": {
  "mqttTopic": "string",
  "roleArn": "string"
},
"securityProfileDescription": "string",
"tags": [
  {
    "Key": "string",
    "Value": "string"
  }
]
}

```

## URI Request Parameters

The request uses the following URI parameters.

### securityProfileName

The name you are giving to the security profile.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### additionalMetricsToRetain

*This parameter has been deprecated.*

Please use [CreateSecurityProfile:additionalMetricsToRetainV2](#) instead.

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the profile's behaviors, but it is also retained for any metric specified here. Can be used with custom metrics; cannot be used with dimensions.

Type: Array of strings

Required: No

### additionalMetricsToRetainV2

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the profile's behaviors, but it is also retained for any metric specified here. Can be used with custom metrics; cannot be used with dimensions.

Type: Array of [MetricToRetain](#) objects

Required: No

### alertTargets

Specifies the destinations to which alerts are sent. (Alerts are always sent to the console.) Alerts are generated when a device (thing) violates a behavior.

Type: String to [AlertTarget](#) object map

Valid Keys: SNS

Required: No

### behaviors

Specifies the behaviors that, when violated by a device (thing), cause an alert.

Type: Array of [Behavior](#) objects

Array Members: Maximum number of 100 items.

Required: No

### [metricsExportConfig](#)

Specifies the MQTT topic and role ARN required for metric export.

Type: [MetricsExportConfig](#) object

Required: No

### [securityProfileDescription](#)

A description of the security profile.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: `[\p{Graph}\x20]*`

Required: No

### [tags](#)

Metadata that can be used to manage the security profile.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "securityProfileArn": "string",
  "securityProfileName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### securityProfileArn

The ARN of the security profile.

Type: String

### securityProfileName

The name you gave to the security profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateStream

Service: Amazon IoT

Creates a stream for delivering one or more large files in chunks over MQTT. A stream transports data bytes in chunks or blocks packaged as MQTT messages from a source like S3. You can have one or more files associated with a stream.

Requires permission to access the [CreateStream](#) action.

## Request Syntax

```
POST /streams/streamId HTTP/1.1  
Content-type: application/json
```

```
{  
  "description": "string",  
  "files": [  
    {  
      "fileId": number,  
      "s3Location": {  
        "bucket": "string",  
        "key": "string",  
        "version": "string"  
      }  
    }  
  ],  
  "roleArn": "string",  
  "tags": [  
    {  
      "Key": "string",  
      "Value": "string"  
    }  
  ]  
}
```

## URI Request Parameters

The request uses the following URI parameters.

### streamId

The stream ID.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### description

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

Required: No

### files

The files to stream.

Type: Array of [StreamFile](#) objects

Array Members: Minimum number of 1 item. Maximum number of 50 items.

Required: Yes

### roleArn

An IAM role that allows the IoT service principal to access your S3 files.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

### tags

Metadata which can be used to manage streams.



Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "description": "string",
  "streamArn": "string",
  "streamId": "string",
  "streamVersion": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [description](#)

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

### [streamArn](#)

The stream ARN.

Type: String

### [streamId](#)

The stream ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

### **streamVersion**

The version of the stream.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 65535.

## **Errors**

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateThing

Service: Amazon IoT

Creates a thing record in the registry. If this call is made multiple times using the same thing name and configuration, the call will succeed. If this call is made with the same thing name but different configuration a `ResourceAlreadyExistsException` is thrown.

## Note

This is a control plane operation. See [Authorization](#) for information about authorizing control plane actions.

Requires permission to access the [CreateThing](#) action.

## Request Syntax

```
POST /things/thingName HTTP/1.1
Content-type: application/json
```

```
{
  "attributePayload": {
    "attributes": {
      "string" : "string"
    },
    "merge": boolean
  },
  "billingGroupName": "string",
  "thingTypeName": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [thingName](#)

The name of the thing to create.

You can't change a thing's name after you create it. To change a thing's name, you must create a new thing, give it the new name, and then delete the old thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### attributePayload

The attribute payload, which consists of up to three name/value pairs in a JSON document. For example:

```
{\"attributes\":{\"string1\": \"string2\"}}
```

Type: [AttributePayload](#) object

Required: No

### billingGroupName

The name of the billing group the thing will be added to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### thingTypeName

The name of the thing type associated with the new thing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "thingArn": "string",
  "thingId": "string",
  "thingName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [thingArn](#)

The ARN of the new thing.

Type: String

### [thingId](#)

The thing ID.

Type: String

### [thingName](#)

The name of the new thing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# CreateThingGroup

Service: Amazon IoT

Create a thing group.

## Note

This is a control plane operation. See [Authorization](#) for information about authorizing control plane actions.

If the ThingGroup that you create has the exact same attributes as an existing ThingGroup, you will get a 200 success response.

Requires permission to access the [CreateThingGroup](#) action.

## Request Syntax

```
POST /thing-groups/thingGroupName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "parentGroupName": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "thingGroupProperties": {
    "attributePayload": {
      "attributes": {
        "string" : "string"
      },
      "merge": boolean
    },
    "thingGroupDescription": "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### thingGroupName

The thing group name to create.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### parentGroupName

The name of the parent thing group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### tags

Metadata which can be used to manage the thing group.

Type: Array of [Tag](#) objects

Required: No

### thingGroupProperties

The thing group properties.

Type: [ThingGroupProperties](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "thingGroupArn": "string",
  "thingGroupId": "string",
  "thingGroupName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [thingGroupArn](#)

The thing group ARN.

Type: String

### [thingGroupId](#)

The thing group ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\ -]+

### [thingGroupName](#)

The thing group name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_ -]+

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# CreateThingType

Service: Amazon IoT

Creates a new thing type. If this call is made multiple times using the same thing type name and configuration, the call will succeed. If this call is made with the same thing type name but different configuration a `ResourceAlreadyExistsException` is thrown.

Requires permission to access the [CreateThingType](#) action.

## Request Syntax

```
POST /thing-types/thingTypeName HTTP/1.1
Content-type: application/json

{
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "thingTypeProperties": {
    "mqtt5Configuration": {
      "propagatingAttributes": [
        {
          "connectionAttribute": "string",
          "thingAttribute": "string",
          "userPropertyKey": "string"
        }
      ]
    },
    "searchableAttributes": [ "string" ],
    "thingTypeDescription": "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [thingTypeName](#)

The name of the thing type.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### tags

Metadata which can be used to manage the thing type.

Type: Array of [Tag](#) objects

Required: No

### thingTypeProperties

The ThingTypeProperties for the thing type to create. It contains information about the new thing type including a description, and a list of searchable thing attribute names.

Type: [ThingTypeProperties](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "thingTypeArn": "string",
  "thingTypeId": "string",
  "thingTypeName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### thingTypeArn

The Amazon Resource Name (ARN) of the thing type.

Type: String

### thingTypeId

The thing type ID.

Type: String

### thingTypeName

The name of the thing type.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ServiceUnavailableException**

The service is temporarily unavailable.



HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateTopicRule

Service: Amazon IoT

Creates a rule. Creating rules is an administrator-level action. Any user who has permission to create rules will be able to access data processed by the rule.

Requires permission to access the [CreateTopicRule](#) action.

## Request Syntax

```
POST /rules/ruleName HTTP/1.1
x-amz-tagging: tags
Content-type: application/json

{
  "actions": [
    {
      "cloudwatchAlarm": {
        "alarmName": "string",
        "roleArn": "string",
        "stateReason": "string",
        "stateValue": "string"
      },
      "cloudwatchLogs": {
        "batchMode": boolean,
        "logGroupName": "string",
        "roleArn": "string"
      },
      "cloudwatchMetric": {
        "metricName": "string",
        "metricNamespace": "string",
        "metricTimestamp": "string",
        "metricUnit": "string",
        "metricValue": "string",
        "roleArn": "string"
      },
      "dynamoDB": {
        "hashKeyField": "string",
        "hashKeyType": "string",
        "hashKeyValue": "string",
        "operation": "string",
        "payloadField": "string",
        "rangeKeyField": "string",
```

```
    "rangeKeyType": "string",
    "rangeKeyValue": "string",
    "roleArn": "string",
    "tableName": "string"
  },
  "dynamoDBv2": {
    "putItem": {
      "tableName": "string"
    },
    "roleArn": "string"
  },
  "elasticsearch": {
    "endpoint": "string",
    "id": "string",
    "index": "string",
    "roleArn": "string",
    "type": "string"
  },
  "firehose": {
    "batchMode": boolean,
    "deliveryStreamName": "string",
    "roleArn": "string",
    "separator": "string"
  },
  "http": {
    "auth": {
      "sigv4": {
        "roleArn": "string",
        "serviceName": "string",
        "signingRegion": "string"
      }
    },
    "confirmationUrl": "string",
    "headers": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    "url": "string"
  },
  "iotAnalytics": {
    "batchMode": boolean,
    "channelArn": "string",
```

```

    "channelName": "string",
    "roleArn": "string"
  },
  "iotEvents": {
    "batchMode": boolean,
    "inputName": "string",
    "messageId": "string",
    "roleArn": "string"
  },
  "iotSiteWise": {
    "putAssetPropertyValueEntries": [
      {
        "assetId": "string",
        "entryId": "string",
        "propertyAlias": "string",
        "propertyId": "string",
        "propertyValues": [
          {
            "quality": "string",
            "timestamp": {
              "offsetInNanos": "string",
              "timeInSeconds": "string"
            },
            "value": {
              "booleanValue": "string",
              "doubleValue": "string",
              "integerValue": "string",
              "stringValue": "string"
            }
          }
        ]
      }
    ]
  },
  "roleArn": "string"
},
"kafka": {
  "clientProperties": {
    "string" : "string"
  },
  "destinationArn": "string",
  "headers": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}

```

```
    }
  ],
  "key": "string",
  "partition": "string",
  "topic": "string"
},
"kinesis": {
  "partitionKey": "string",
  "roleArn": "string",
  "streamName": "string"
},
"lambda": {
  "functionArn": "string"
},
"location": {
  "deviceId": "string",
  "latitude": "string",
  "longitude": "string",
  "roleArn": "string",
  "timestamp": {
    "unit": "string",
    "value": "string"
  },
  "trackerName": "string"
},
"openSearch": {
  "endpoint": "string",
  "id": "string",
  "index": "string",
  "roleArn": "string",
  "type": "string"
},
"republish": {
  "headers": {
    "contentType": "string",
    "correlationData": "string",
    "messageExpiry": "string",
    "payloadFormatIndicator": "string",
    "responseTopic": "string",
    "userProperties": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  }
}
```

```
    ],
    },
    "qos": number,
    "roleArn": "string",
    "topic": "string"
  },
  "s3": {
    "bucketName": "string",
    "cannedAcl": "string",
    "key": "string",
    "roleArn": "string"
  },
  "salesforce": {
    "token": "string",
    "url": "string"
  },
  "sns": {
    "messageFormat": "string",
    "roleArn": "string",
    "targetArn": "string"
  },
  "sqs": {
    "queueUrl": "string",
    "roleArn": "string",
    "useBase64": boolean
  },
  "stepFunctions": {
    "executionNamePrefix": "string",
    "roleArn": "string",
    "stateMachineName": "string"
  },
  "timestream": {
    "databaseName": "string",
    "dimensions": [
      {
        "name": "string",
        "value": "string"
      }
    ],
    "roleArn": "string",
    "tableName": "string",
    "timestamp": {
      "unit": "string",
      "value": "string"
    }
  }
}
```

```
    }
  }
}
],
"awsIotSqlVersion": "string",
"description": "string",
"errorAction": {
  "cloudwatchAlarm": {
    "alarmName": "string",
    "roleArn": "string",
    "stateReason": "string",
    "stateValue": "string"
  },
  "cloudwatchLogs": {
    "batchMode": boolean,
    "logGroupName": "string",
    "roleArn": "string"
  },
  "cloudwatchMetric": {
    "metricName": "string",
    "metricNamespace": "string",
    "metricTimestamp": "string",
    "metricUnit": "string",
    "metricValue": "string",
    "roleArn": "string"
  },
  "dynamoDB": {
    "hashKeyField": "string",
    "hashKeyType": "string",
    "hashKeyValue": "string",
    "operation": "string",
    "payloadField": "string",
    "rangeKeyField": "string",
    "rangeKeyType": "string",
    "rangeKeyValue": "string",
    "roleArn": "string",
    "tableName": "string"
  },
  "dynamoDBv2": {
    "putItem": {
      "tableName": "string"
    },
    "roleArn": "string"
  }
},
```

```
"elasticsearch": {
  "endpoint": "string",
  "id": "string",
  "index": "string",
  "roleArn": "string",
  "type": "string"
},
"firehose": {
  "batchMode": boolean,
  "deliveryStreamName": "string",
  "roleArn": "string",
  "separator": "string"
},
"http": {
  "auth": {
    "sigv4": {
      "roleArn": "string",
      "serviceName": "string",
      "signingRegion": "string"
    }
  },
  "confirmationUrl": "string",
  "headers": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "url": "string"
},
"iotAnalytics": {
  "batchMode": boolean,
  "channelArn": "string",
  "channelName": "string",
  "roleArn": "string"
},
"iotEvents": {
  "batchMode": boolean,
  "inputName": "string",
  "messageId": "string",
  "roleArn": "string"
},
"iotSiteWise": {
  "putAssetPropertyValueEntries": [
```



```
{
  "assetId": "string",
  "entryId": "string",
  "propertyAlias": "string",
  "propertyId": "string",
  "propertyValues": [
    {
      "quality": "string",
      "timestamp": {
        "offsetInNanos": "string",
        "timeInSeconds": "string"
      },
      "value": {
        "booleanValue": "string",
        "doubleValue": "string",
        "integerValue": "string",
        "stringValue": "string"
      }
    }
  ]
},
"roleArn": "string"
},
"kafka": {
  "clientProperties": {
    "string" : "string"
  },
  "destinationArn": "string",
  "headers": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "key": "string",
  "partition": "string",
  "topic": "string"
},
"kinesis": {
  "partitionKey": "string",
  "roleArn": "string",
  "streamName": "string"
},

```

```
"lambda": {
  "functionArn": "string"
},
"location": {
  "deviceId": "string",
  "latitude": "string",
  "longitude": "string",
  "roleArn": "string",
  "timestamp": {
    "unit": "string",
    "value": "string"
  },
  "trackerName": "string"
},
"openSearch": {
  "endpoint": "string",
  "id": "string",
  "index": "string",
  "roleArn": "string",
  "type": "string"
},
"republish": {
  "headers": {
    "contentType": "string",
    "correlationData": "string",
    "messageExpiry": "string",
    "payloadFormatIndicator": "string",
    "responseTopic": "string",
    "userProperties": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  },
  "qos": number,
  "roleArn": "string",
  "topic": "string"
},
"s3": {
  "bucketName": "string",
  "cannedAcl": "string",
  "key": "string",
  "roleArn": "string"
}
```

```
    },
    "salesforce": {
      "token": "string",
      "url": "string"
    },
    "sns": {
      "messageFormat": "string",
      "roleArn": "string",
      "targetArn": "string"
    },
    "sqs": {
      "queueUrl": "string",
      "roleArn": "string",
      "useBase64": boolean
    },
    "stepFunctions": {
      "executionNamePrefix": "string",
      "roleArn": "string",
      "stateMachineName": "string"
    },
    "timestream": {
      "databaseName": "string",
      "dimensions": [
        {
          "name": "string",
          "value": "string"
        }
      ],
      "roleArn": "string",
      "tableName": "string",
      "timestamp": {
        "unit": "string",
        "value": "string"
      }
    }
  },
  "ruleDisabled": boolean,
  "sql": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

## ruleName

The name of the rule.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^[a-zA-Z0-9_]+$`

Required: Yes

## tags

Metadata which can be used to manage the topic rule.

### Note

For URI Request parameters use format: `...key1=value1&key2=value2...`

For the CLI command-line parameter use format: `--tags "key1=value1&key2=value2..."`

For the cli-input-json file use format: `"tags": "key1=value1&key2=value2..."`

## Request Body

The request accepts the following data in JSON format.

## actions

The actions associated with the rule.

Type: Array of [Action](#) objects

Array Members: Minimum number of 0 items. Maximum number of 10 items.

Required: Yes

## awsIotSqlVersion

The version of the SQL rules engine to use when evaluating the rule.

Type: String

Required: No

## description

The description of the rule.

Type: String

Required: No

### errorAction

The action to take when an error occurs.

Type: [Action](#) object

Required: No

### ruleDisabled

Specifies whether the rule is disabled.

Type: Boolean

Required: No

### sql

The SQL statement used to query the topic. For more information, see [Amazon IoT SQL Reference](#) in the *Amazon IoT Developer Guide*.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### **InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **SqlParseException**

The Rule-SQL expression can't be parsed correctly.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# CreateTopicRuleDestination

Service: Amazon IoT

Creates a topic rule destination. The destination must be confirmed prior to use.

Requires permission to access the [CreateTopicRuleDestination](#) action.

## Request Syntax

```
POST /destinations HTTP/1.1
Content-type: application/json

{
  "destinationConfiguration": {
    "httpUrlConfiguration": {
      "confirmationUrl": "string"
    },
    "vpcConfiguration": {
      "roleArn": "string",
      "securityGroups": [ "string" ],
      "subnetIds": [ "string" ],
      "vpcId": "string"
    }
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### destinationConfiguration

The topic rule destination configuration.

Type: [TopicRuleDestinationConfiguration](#) object

Required: Yes



## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "topicRuleDestination": {
    "arn": "string",
    "createdAt": number,
    "httpUrlProperties": {
      "confirmationUrl": "string"
    },
    "lastUpdatedAt": number,
    "status": "string",
    "statusReason": "string",
    "vpcProperties": {
      "roleArn": "string",
      "securityGroups": [ "string" ],
      "subnetIds": [ "string" ],
      "vpcId": "string"
    }
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### topicRuleDestination

The topic rule destination.

Type: [TopicRuleDestination](#) object

## Errors

### **ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### **InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# DeleteAccountAuditConfiguration

Service: Amazon IoT

Restores the default settings for Device Defender audits for this account. Any configuration data you entered is deleted and all audit checks are reset to disabled.

Requires permission to access the [DeleteAccountAuditConfiguration](#) action.

## Request Syntax

```
DELETE /audit/configuration?deleteScheduledAudits=deleteScheduledAudits HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [deleteScheduledAudits](#)

If true, all scheduled audits are deleted.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

## InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteAuditSuppression

Service: Amazon IoT

Deletes a Device Defender audit suppression.

Requires permission to access the [DeleteAuditSuppression](#) action.

## Request Syntax

```
POST /audit/suppressions/delete HTTP/1.1
Content-type: application/json

{
  "checkName": "string",
  "resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateArn": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "issuerCertificateIdentifier": {
      "issuerCertificateSerialNumber": "string",
      "issuerCertificateSubject": "string",
      "issuerId": "string"
    },
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "string"
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

## checkName

An audit check name. Checks must be enabled for your account. (Use `DescribeAccountAuditConfiguration` to see the list of all checks, including those that are enabled or use `UpdateAccountAuditConfiguration` to select which checks are enabled.)

Type: String

Required: Yes

## resourceIdentifier

Information that identifies the noncompliant resource.

Type: [ResourceIdentifier](#) object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# DeleteAuthorizer

Service: Amazon IoT

Deletes an authorizer.

Requires permission to access the [DeleteAuthorizer](#) action.

## Request Syntax

```
DELETE /authorizer/authorizerName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### authorizerName

The name of the authorizer to delete.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=, @- ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### DeleteConflictException

You can't delete the resource because it is attached to one or more resources.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteBillingGroup

Service: Amazon IoT

Deletes the billing group.

Requires permission to access the [DeleteBillingGroup](#) action.

## Request Syntax

```
DELETE /billing-groups/billingGroupName?expectedVersion=expectedVersion HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### billingGroupName

The name of the billing group.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

### expectedVersion

The expected version of the billing group. If the version of the billing group does not match the expected version specified in the request, the DeleteBillingGroup request is rejected with a VersionConflictException.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# DeleteCACertificate

Service: Amazon IoT

Deletes a registered CA certificate.

Requires permission to access the [DeleteCACertificate](#) action.

## Request Syntax

```
DELETE /cacertificate/caCertificateId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### caCertificateId

The ID of the certificate to delete. (The last part of the certificate ARN contains the certificate ID.)

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **CertificateStateException**

The certificate operation is not allowed.

HTTP Status Code: 406

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:



- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteCertificate

Service: Amazon IoT

Deletes the specified certificate.

A certificate cannot be deleted if it has a policy or IoT thing attached to it or if its status is set to ACTIVE. To delete a certificate, first use the [DetachPolicy](#) action to detach all policies. Next, use the [UpdateCertificate](#) action to set the certificate to the INACTIVE status.

Requires permission to access the [DeleteCertificate](#) action.

## Request Syntax

```
DELETE /certificates/certificateId?forceDelete=forceDelete HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [certificateId](#)

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: Yes

### [forceDelete](#)

Forces the deletion of a certificate if it is inactive and is not attached to an IoT thing.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **CertificateStateException**

The certificate operation is not allowed.

HTTP Status Code: 406

### **DeleteConflictException**

You can't delete the resource because it is attached to one or more resources.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteCertificateProvider

Service: Amazon IoT

Deletes a certificate provider.

Requires permission to access the [DeleteCertificateProvider](#) action.

If you delete the certificate provider resource, the behavior of `CreateCertificateFromCsr` will resume, and Amazon IoT will create certificates signed by Amazon IoT from a certificate signing request (CSR).

## Request Syntax

```
DELETE /certificate-providers/certificateProviderName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [certificateProviderName](#)

The name of the certificate provider.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **DeleteConflictException**

You can't delete the resource because it is attached to one or more resources.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteCommand

Service: Amazon IoT

Delete a command resource.

## Request Syntax

```
DELETE /commands/commandId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### commandId

The unique identifier of the command to be deleted.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 statusCode
```

## Response Elements

If the action is successful, the service sends back the following HTTP response.

### statusCode

The status code for the command deletion request. The status code is in the 200 range for a successful request.



- If the command hasn't been deprecated, or has been deprecated for a duration that is shorter than the maximum time out duration of 12 hours, when calling the `DeleteCommand` request, the deletion will be scheduled and a 202 status code will be returned. While the command is being deleted, it will be in a `pendingDeletion` state. Once the time out duration has been reached, the command will be permanently removed from your account.
- If the command has been deprecated for a duration that is longer than the maximum time out duration of 12 hours, when calling the `DeleteCommand` request, the command will be deleted immediately and a 204 status code will be returned.

## Errors

### **ConflictException**

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### **InternalServerErrorException**

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **ValidationException**

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)

- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteCommandExecution

Service: Amazon IoT

Delete a command execution.

## Note

Only command executions that enter a terminal state can be deleted from your account.

## Request Syntax

```
DELETE /command-executions/executionId?targetArn=targetArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### executionId

The unique identifier of the command execution that you want to delete from your account.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

### targetArn

The Amazon Resource Number (ARN) of the target device for which you want to delete command executions.

Length Constraints: Maximum length of 2048.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ConflictException

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### InternalServerError

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)

- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteCustomMetric

Service: Amazon IoT

Deletes a Device Defender detect custom metric.

Requires permission to access the [DeleteCustomMetric](#) action.

## Note

Before you can delete a custom metric, you must first remove the custom metric from all security profiles it's a part of. The security profile associated with the custom metric can be found using the [ListSecurityProfiles](#) API with `metricName` set to your custom metric name.

## Request Syntax

```
DELETE /custom-metric/metricName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### metricName

The name of the custom metric.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9: _- ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)





# DeleteDimension

Service: Amazon IoT

Removes the specified dimension from your Amazon Web Services accounts.

Requires permission to access the [DeleteDimension](#) action.

## Request Syntax

```
DELETE /dimensions/name HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### name

The unique identifier for the dimension that you want to delete.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteDomainConfiguration

Service: Amazon IoT

Deletes the specified domain configuration.

Requires permission to access the [DeleteDomainConfiguration](#) action.

## Request Syntax

```
DELETE /domainConfigurations/domainConfigurationName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### domainConfigurationName

The name of the domain configuration to be deleted.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w. - ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteDynamicThingGroup

Service: Amazon IoT

Deletes a dynamic thing group.

Requires permission to access the [DeleteDynamicThingGroup](#) action.

## Request Syntax

```
DELETE /dynamic-thing-groups/thingGroupName?expectedVersion=expectedVersion HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [expectedVersion](#)

The expected version of the dynamic thing group to delete.

### [thingGroupName](#)

The name of the dynamic thing group to delete.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9: _- ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)



# DeleteFleetMetric

Service: Amazon IoT

Deletes the specified fleet metric. Returns successfully with no error if the deletion is successful or you specify a fleet metric that doesn't exist.

Requires permission to access the [DeleteFleetMetric](#) action.

## Request Syntax

```
DELETE /fleet-metric/metricName?expectedVersion=expectedVersion HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [expectedVersion](#)

The expected version of the fleet metric to delete.

### [metricName](#)

The name of the fleet metric to delete.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9_\-\. ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

### VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)

- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteJob

Service: Amazon IoT

Deletes a job and its related job executions.

Deleting a job may take time, depending on the number of job executions created for the job and various other factors. While the job is being deleted, the status of the job will be shown as "DELETION\_IN\_PROGRESS". Attempting to delete or cancel a job whose status is already "DELETION\_IN\_PROGRESS" will result in an error.

Only 10 jobs may have status "DELETION\_IN\_PROGRESS" at the same time, or a `LimitExceededException` will occur.

Requires permission to access the [DeleteJob](#) action.

## Request Syntax

```
DELETE /jobs/jobId?force=force&namespaceId=namespaceId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### force

(Optional) When true, you can delete a job which is "IN\_PROGRESS". Otherwise, you can only delete a job which is in a terminal state ("COMPLETED" or "CANCELED") or an exception will occur. The default is false.

#### Note

Deleting a job which is "IN\_PROGRESS", will cause a device which is executing the job to be unable to access job information or update the job execution status. Use caution and ensure that each device executing a job which is deleted is able to recover to a valid state.

### jobId

The ID of the job to be deleted.

After a job deletion is completed, you may reuse this jobId when you create a new job. However, this is not recommended, and you must ensure that your devices are not using the jobId to refer to the deleted job.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

### namespaceId

The namespace used to indicate that a job is a customer-managed job.

When you specify a value for this parameter, Amazon IoT Core sends jobs notifications to MQTT topics that contain the value in the following format.

```
$aws/things/THING_NAME/jobs/JOB_ID/notify-namespace-NAMESPACE_ID/
```

#### Note

The namespaceId feature is only supported by Amazon IoT Greengrass at this time. For more information, see [Setting up Amazon IoT Greengrass core devices](#).

Pattern: [a-zA-Z0-9\_-]+

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### InvalidStateTransitionException

An attempt was made to change to an invalid state, for example by deleting a job or a job execution which is "IN\_PROGRESS" without setting the `force` parameter.

HTTP Status Code: 409

### LimitExceededException

A limit has been exceeded.

HTTP Status Code: 410

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)

- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteJobExecution

Service: Amazon IoT

Deletes a job execution.

Requires permission to access the [DeleteJobExecution](#) action.

## Request Syntax

```
DELETE /things/thingName/jobs/jobId/executionNumber/executionNumber?  
force=force&namespaceId=namespaceId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### executionNumber

The ID of the job execution to be deleted. The `executionNumber` refers to the execution of a particular job on a particular device.

Note that once a job execution is deleted, the `executionNumber` may be reused by IoT, so be sure you get and use the correct value here.

Required: Yes

### force

(Optional) When true, you can delete a job execution which is "IN\_PROGRESS". Otherwise, you can only delete a job execution which is in a terminal state ("SUCCEEDED", "FAILED", "REJECTED", "REMOVED" or "CANCELED") or an exception will occur. The default is false.

#### Note

Deleting a job execution which is "IN\_PROGRESS", will cause the device to be unable to access job information or update the job execution status. Use caution and ensure that the device is able to recover to a valid state.

### jobId

The ID of the job whose execution on a particular device will be deleted.



Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

### namespaceId

The namespace used to indicate that a job is a customer-managed job.

When you specify a value for this parameter, Amazon IoT Core sends jobs notifications to MQTT topics that contain the value in the following format.

```
$aws/things/THING_NAME/jobs/JOB_ID/notify-namespace-NAMESPACE_ID/
```

#### Note

The namespaceId feature is only supported by Amazon IoT Greengrass at this time. For more information, see [Setting up Amazon IoT Greengrass core devices](#).

Pattern: [a-zA-Z0-9\_-]+

### thingName

The name of the thing whose job execution will be deleted.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### InvalidStateTransitionException

An attempt was made to change to an invalid state, for example by deleting a job or a job execution which is "IN\_PROGRESS" without setting the force parameter.

HTTP Status Code: 409

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)

- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteJobTemplate

Service: Amazon IoT

Deletes the specified job template.

## Request Syntax

```
DELETE /job-templates/jobTemplateId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### jobTemplateId

The unique identifier of the job template to delete.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteMitigationAction

Service: Amazon IoT

Deletes a defined mitigation action from your Amazon Web Services accounts.

Requires permission to access the [DeleteMitigationAction](#) action.

## Request Syntax

```
DELETE /mitigationactions/actions/actionName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### actionName

The name of the mitigation action that you want to delete.

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteOTAUpdate

Service: Amazon IoT

Delete an OTA update.

Requires permission to access the [DeleteOTAUpdate](#) action.

## Request Syntax

```
DELETE /otaUpdates/otaUpdateId?  
deleteStream=deleteStream&forceDeleteAWSJob=forceDeleteAWSJob HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [deleteStream](#)

When true, the stream created by the OTAUpdate process is deleted when the OTA update is deleted. Ignored if the stream specified in the OTAUpdate is supplied by the user.

### [forceDeleteAWSJob](#)

When true, deletes the Amazon IoT job created by the OTAUpdate process even if it is "IN\_PROGRESS". Otherwise, if the job is not in a terminal state ("COMPLETED" or "CANCELED") an exception will occur. The default is false.

### [otaUpdateId](#)

The ID of the OTA update to delete.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.



## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeletePackage

Service: Amazon IoT

Deletes a specific version from a software package.

**Note:** All package versions must be deleted before deleting the software package.

Requires permission to access the [DeletePackageVersion](#) action.

## Request Syntax

```
DELETE /packages/packageName?clientToken=clientToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [clientToken](#)

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern:  $\backslash S\{36, 64\}$

### [packageName](#)

The name of the target software package.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern:  $[a-zA-Z0-9-_. ]+$

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalServerErrorException

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# DeletePackageVersion

Service: Amazon IoT

Deletes a specific version from a software package.

**Note:** If a package version is designated as default, you must remove the designation from the software package using the [UpdatePackage](#) action.

## Request Syntax

```
DELETE /packages/packageName/versions/versionName?clientToken=clientToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [clientToken](#)

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

### [packageName](#)

The name of the associated software package.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_.]+`

Required: Yes

### [versionName](#)

The name of the target package version.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9-_.]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalServerError

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# DeletePolicy

Service: Amazon IoT

Deletes the specified policy.

A policy cannot be deleted if it has non-default versions or it is attached to any certificate.

To delete a policy, use the [DeletePolicyVersion](#) action to delete all non-default versions of the policy; use the [DetachPolicy](#) action to detach the policy from any certificate; and then use the DeletePolicy action to delete the policy.

When a policy is deleted using DeletePolicy, its default version is deleted with it.

## Note

Because of the distributed nature of Amazon, it can take up to five minutes after a policy is detached before it's ready to be deleted.

Requires permission to access the [DeletePolicy](#) action.

## Request Syntax

```
DELETE /policies/policyName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [policyName](#)

The name of the policy to delete.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### DeleteConflictException

You can't delete the resource because it is attached to one or more resources.

HTTP Status Code: 409

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeletePolicyVersion

Service: Amazon IoT

Deletes the specified version of the specified policy. You cannot delete the default version of a policy using this action. To delete the default version of a policy, use [DeletePolicy](#). To find out which version of a policy is marked as the default version, use [ListPolicyVersions](#).

Requires permission to access the [DeletePolicyVersion](#) action.

## Request Syntax

```
DELETE /policies/policyName/version/policyVersionId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [policyName](#)

The name of the policy.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

### [policyVersionId](#)

The policy version ID.

Pattern: `[0-9 ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### DeleteConflictException

You can't delete the resource because it is attached to one or more resources.

HTTP Status Code: 409

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteProvisioningTemplate

Service: Amazon IoT

Deletes a provisioning template.

Requires permission to access the [DeleteProvisioningTemplate](#) action.

## Request Syntax

```
DELETE /provisioning-templates/templateName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### templateName

The name of the fleet provision template to delete.

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### **DeleteConflictException**

You can't delete the resource because it is attached to one or more resources.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401



## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteProvisioningTemplateVersion

Service: Amazon IoT

Deletes a provisioning template version.

Requires permission to access the [DeleteProvisioningTemplateVersion](#) action.

## Request Syntax

```
DELETE /provisioning-templates/templateName/versions/versionId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### templateName

The name of the provisioning template version to delete.

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

Required: Yes

### versionId

The provisioning template version ID to delete.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### **DeleteConflictException**

You can't delete the resource because it is attached to one or more resources.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteRegistrationCode

Service: Amazon IoT

Deletes a CA certificate registration code.

Requires permission to access the [DeleteRegistrationCode](#) action.

## Request Syntax

```
DELETE /registrationcode HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteRoleAlias

Service: Amazon IoT

Deletes a role alias

Requires permission to access the [DeleteRoleAlias](#) action.

## Request Syntax

```
DELETE /role-aliases/roleAlias HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [roleAlias](#)

The role alias to delete.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=, @- ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### DeleteConflictException

You can't delete the resource because it is attached to one or more resources.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)



- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteScheduledAudit

Service: Amazon IoT

Deletes a scheduled audit.

Requires permission to access the [DeleteScheduledAudit](#) action.

## Request Syntax

```
DELETE /audit/scheduledaudits/scheduledAuditName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### scheduledAuditName

The name of the scheduled audit you want to delete.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteSecurityProfile

Service: Amazon IoT

Deletes a Device Defender security profile.

Requires permission to access the [DeleteSecurityProfile](#) action.

## Request Syntax

```
DELETE /security-profiles/securityProfileName?expectedVersion=expectedVersion HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [expectedVersion](#)

The expected version of the security profile. A new version is generated whenever the security profile is updated. If you specify a value that is different from the actual version, a `VersionConflictException` is thrown.

### [securityProfileName](#)

The name of the security profile to be deleted.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# DeleteStream

Service: Amazon IoT

Deletes a stream.

Requires permission to access the [DeleteStream](#) action.

## Request Syntax

```
DELETE /streams/streamId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### streamId

The stream ID.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### DeleteConflictException

You can't delete the resource because it is attached to one or more resources.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)



- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteThing

Service: Amazon IoT

Deletes the specified thing. Returns successfully with no error if the deletion is successful or you specify a thing that doesn't exist.

Requires permission to access the [DeleteThing](#) action.

## Request Syntax

```
DELETE /things/thingName?expectedVersion=expectedVersion HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### expectedVersion

The expected version of the thing record in the registry. If the version of the record in the registry does not match the expected version specified in the request, the DeleteThing request is rejected with a `VersionConflictException`.

### thingName

The name of the thing to delete.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

### VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteThingGroup

Service: Amazon IoT

Deletes a thing group.

Requires permission to access the [DeleteThingGroup](#) action.

## Request Syntax

```
DELETE /thing-groups/thingGroupName?expectedVersion=expectedVersion HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [expectedVersion](#)

The expected version of the thing group to delete.

### [thingGroupName](#)

The name of the thing group to delete.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# DeleteThingType

Service: Amazon IoT

Deletes the specified thing type. You cannot delete a thing type if it has things associated with it. To delete a thing type, first mark it as deprecated by calling [DeprecateThingType](#), then remove any associated things by calling [UpdateThing](#) to change the thing type on any associated thing, and finally use [DeleteThingType](#) to delete the thing type.

Requires permission to access the [DeleteThingType](#) action.

## Request Syntax

```
DELETE /thing-types/thingTypeName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [thingTypeName](#)

The name of the thing type.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.



## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)

- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteTopicRule

Service: Amazon IoT

Deletes the rule.

Requires permission to access the [DeleteTopicRule](#) action.

## Request Syntax

```
DELETE /rules/ruleName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### ruleName

The name of the rule.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^[a-zA-Z0-9_]+$`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ConflictingResourceUpdateException

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeleteTopicRuleDestination

Service: Amazon IoT

Deletes a topic rule destination.

Requires permission to access the [DeleteTopicRuleDestination](#) action.

## Request Syntax

```
DELETE /destinations/arn+ HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [arn](#)

The ARN of the topic rule destination to delete.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ConflictingResourceUpdateException

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### **InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)





# DeleteV2LoggingLevel

Service: Amazon IoT

Deletes a logging level.

Requires permission to access the [DeleteV2LoggingLevel](#) action.

## Request Syntax

```
DELETE /v2LoggingLevel?targetName=targetName&targetType=targetType HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### targetName

The name of the resource for which you are configuring logging.

Required: Yes

### targetType

The type of resource for which you are configuring logging. Must be `THING_Group`.

Valid Values: `DEFAULT` | `THING_GROUP` | `CLIENT_ID` | `SOURCE_IP` | `PRINCIPAL_ID`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DeprecateThingType

Service: Amazon IoT

Deprecates a thing type. You can not associate new things with deprecated thing type.

Requires permission to access the [DeprecateThingType](#) action.

## Request Syntax

```
POST /thing-types/thingTypeName/deprecate HTTP/1.1
Content-type: application/json

{
  "undoDeprecate": boolean
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [thingTypeName](#)

The name of the thing type to deprecate.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [undoDeprecate](#)

Whether to undeprecate a deprecated thing type. If **true**, the thing type will not be deprecated anymore and you can associate it with things.

Type: Boolean

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeAccountAuditConfiguration

Service: Amazon IoT

Gets information about the Device Defender audit settings for this account. Settings include how audit notifications are sent and which audit checks are enabled or disabled.

Requires permission to access the [DescribeAccountAuditConfiguration](#) action.

## Request Syntax

```
GET /audit/configuration HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "auditCheckConfigurations": {
    "string" : {
      "configuration": {
        "string" : "string"
      },
      "enabled": boolean
    }
  },
  "auditNotificationTargetConfigurations": {
    "string" : {
      "enabled": boolean,
      "roleArn": "string",
      "targetArn": "string"
    }
  },
  "roleArn": "string"
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [auditCheckConfigurations](#)

Which audit checks are enabled and disabled for this account.

Type: String to [AuditCheckConfiguration](#) object map

### [auditNotificationTargetConfigurations](#)

Information about the targets to which audit notifications are sent for this account.

Type: String to [AuditNotificationTarget](#) object map

Valid Keys: SNS

### [roleArn](#)

The ARN of the role that grants permission to Amazon IoT to access information about your devices, policies, certificates, and other items as required when performing an audit.

On the first call to `UpdateAccountAuditConfiguration`, this parameter is required.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# DescribeAuditFinding

Service: Amazon IoT

Gets information about a single audit finding. Properties include the reason for noncompliance, the severity of the issue, and the start time when the audit that returned the finding.

Requires permission to access the [DescribeAuditFinding](#) action.

## Request Syntax

```
GET /audit/findings/findingId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [findingId](#)

A unique identifier for a single audit finding. You can use this identifier to apply mitigation actions to the finding.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "finding": {
    "checkName": "string",
    "findingId": "string",
    "findingTime": number,
    "isSuppressed": boolean,
```

```
"nonCompliantResource": {
  "additionalInfo": {
    "string" : "string"
  },
  "resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateArn": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "issuerCertificateIdentifier": {
      "issuerCertificateSerialNumber": "string",
      "issuerCertificateSubject": "string",
      "issuerId": "string"
    },
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "string"
  },
  "resourceType": "string"
},
"reasonForNonCompliance": "string",
"reasonForNonComplianceCode": "string",
"relatedResources": [
  {
    "additionalInfo": {
      "string" : "string"
    },
    "resourceIdentifier": {
      "account": "string",
      "caCertificateId": "string",
      "clientId": "string",
      "cognitoIdentityPoolId": "string",
      "deviceCertificateArn": "string",
      "deviceCertificateId": "string",
      "iamRoleArn": "string",
      "issuerCertificateIdentifier": {
        "issuerCertificateSerialNumber": "string",
        "issuerCertificateSubject": "string",
        "issuerId": "string"
      }
    }
  }
]
```

```
    },
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "string"
  },
  "resourceType": "string"
}
],
"severity": "string",
"taskId": "string",
"taskStartTime": number
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### finding

The findings (results) of the audit.

Type: [AuditFinding](#) object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeAuditMitigationActionsTask

Service: Amazon IoT

Gets information about an audit mitigation task that is used to apply mitigation actions to a set of audit findings. Properties include the actions being applied, the audit checks to which they're being applied, the task status, and aggregated task statistics.

## Request Syntax

```
GET /audit/mitigationactions/tasks/taskId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### taskId

The unique identifier for the audit mitigation task.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "actionsDefinition": [
    {
      "actionParams": {
        "addThingsToThingGroupParams": {
          "overrideDynamicGroups": boolean,
          "thingGroupNames": [ "string" ]
        },

```

```

    "enableIoTLoggingParams": {
      "logLevel": "string",
      "roleArnForLogging": "string"
    },
    "publishFindingToSnsParams": {
      "topicArn": "string"
    },
    "replaceDefaultPolicyVersionParams": {
      "templateName": "string"
    },
    "updateCACertificateParams": {
      "action": "string"
    },
    "updateDeviceCertificateParams": {
      "action": "string"
    }
  },
  "id": "string",
  "name": "string",
  "roleArn": "string"
}
],
"auditCheckToActionsMapping": {
  "string" : [ "string" ]
},
"endTime": number,
"startTime": number,
"target": {
  "auditCheckToReasonCodeFilter": {
    "string" : [ "string" ]
  },
  "auditTaskId": "string",
  "findingIds": [ "string" ]
},
"taskStatistics": {
  "string" : {
    "canceledFindingsCount": number,
    "failedFindingsCount": number,
    "skippedFindingsCount": number,
    "succeededFindingsCount": number,
    "totalFindingsCount": number
  }
},
"taskStatus": "string"

```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### actionsDefinition

Specifies the mitigation actions and their parameters that are applied as part of this task.

Type: Array of [MitigationAction](#) objects

### auditCheckToActionsMapping

Specifies the mitigation actions that should be applied to specific audit checks.

Type: String to array of strings map

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

### endTime

The date and time when the task was completed or canceled.

Type: Timestamp

### startTime

The date and time when the task was started.

Type: Timestamp

### target

Identifies the findings to which the mitigation actions are applied. This can be by audit checks, by audit task, or a set of findings.

Type: [AuditMitigationActionsTaskTarget](#) object

## **taskStatistics**

Aggregate counts of the results when the mitigation tasks were applied to the findings for this audit mitigation actions task.

Type: String to [TaskStatisticsForAuditCheck](#) object map

## **taskStatus**

The current status of the task.

Type: String

Valid Values: IN\_PROGRESS | COMPLETED | FAILED | CANCELED

## **Errors**

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:



- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeAuditSuppression

Service: Amazon IoT

Gets information about a Device Defender audit suppression.

## Request Syntax

```
POST /audit/suppressions/describe HTTP/1.1
Content-type: application/json

{
  "checkName": "string",
  "resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateArn": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "issuerCertificateIdentifier": {
      "issuerCertificateSerialNumber": "string",
      "issuerCertificateSubject": "string",
      "issuerId": "string"
    },
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "string"
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

## checkName

An audit check name. Checks must be enabled for your account. (Use `DescribeAccountAuditConfiguration` to see the list of all checks, including those that are enabled or use `UpdateAccountAuditConfiguration` to select which checks are enabled.)

Type: String

Required: Yes

## resourceIdentifier

Information that identifies the noncompliant resource.

Type: [ResourceIdentifier](#) object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "checkName": "string",
  "description": "string",
  "expirationDate": number,
  "resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateArn": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "issuerCertificateIdentifier": {
      "issuerCertificateSerialNumber": "string",
      "issuerCertificateSubject": "string",
      "issuerId": "string"
    },
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    }
  }
}
```

```
    },  
    "roleAliasArn": "string"  
  },  
  "suppressIndefinitely": boolean  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### checkName

An audit check name. Checks must be enabled for your account. (Use `DescribeAccountAuditConfiguration` to see the list of all checks, including those that are enabled or use `UpdateAccountAuditConfiguration` to select which checks are enabled.)

Type: String

### description

The description of the audit suppression.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: `[\p{Graph}\x20]*`

### expirationDate

The epoch timestamp in seconds at which this suppression expires.

Type: Timestamp

### resourceIdentifier

Information that identifies the noncompliant resource.

Type: [ResourceIdentifier](#) object

### suppressIndefinitely

Indicates whether a suppression should exist indefinitely or not.

Type: Boolean

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)

- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeAuditTask

Service: Amazon IoT

Gets information about a Device Defender audit.

Requires permission to access the [DescribeAuditTask](#) action.

## Request Syntax

```
GET /audit/tasks/taskId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [taskId](#)

The ID of the audit whose information you want to get.

Length Constraints: Minimum length of 1. Maximum length of 40.

Pattern: [a-zA-Z0-9\-\-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "auditDetails": {
    "string" : {
      "checkCompliant": boolean,
      "checkRunStatus": "string",
      "errorCode": "string",
      "message": "string",
```

```
    "nonCompliantResourcesCount": number,
    "suppressedNonCompliantResourcesCount": number,
    "totalResourcesCount": number
  }
},
"scheduledAuditName": "string",
"taskStartTime": number,
"taskStatistics": {
  "canceledChecks": number,
  "compliantChecks": number,
  "failedChecks": number,
  "inProgressChecks": number,
  "nonCompliantChecks": number,
  "totalChecks": number,
  "waitingForDataCollectionChecks": number
},
"taskStatus": "string",
"taskType": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### auditDetails

Detailed information about each check performed during this audit.

Type: String to [AuditCheckDetails](#) object map

### scheduledAuditName

The name of the scheduled audit (only if the audit was a scheduled audit).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

### taskStartTime

The time the audit started.



Type: Timestamp

### taskStatistics

Statistical information about the audit.

Type: [TaskStatistics](#) object

### taskStatus

The status of the audit: one of "IN\_PROGRESS", "COMPLETED", "FAILED", or "CANCELED".

Type: String

Valid Values: IN\_PROGRESS | COMPLETED | FAILED | CANCELED

### taskType

The type of audit: "ON\_DEMAND\_AUDIT\_TASK" or "SCHEDULED\_AUDIT\_TASK".

Type: String

Valid Values: ON\_DEMAND\_AUDIT\_TASK | SCHEDULED\_AUDIT\_TASK

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

## HTTP Status Code: 400

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeAuthorizer

Service: Amazon IoT

Describes an authorizer.

Requires permission to access the [DescribeAuthorizer](#) action.

## Request Syntax

```
GET /authorizer/authorizerName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [authorizerName](#)

The name of the authorizer to describe.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "authorizerDescription": {
    "authorizerArn": "string",
    "authorizerFunctionArn": "string",
    "authorizerName": "string",
    "creationDate": number,
    "enableCachingForHttp": boolean,
```

```
"lastModifiedDate": number,  
"signingDisabled": boolean,  
"status": "string",  
"tokenKeyName": "string",  
"tokenSigningPublicKeys": {  
  "string" : "string"  
}  
}  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### authorizerDescription

The authorizer description.

Type: [AuthorizerDescription](#) object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeBillingGroup

Service: Amazon IoT

Returns information about a billing group.

Requires permission to access the [DescribeBillingGroup](#) action.

## Request Syntax

```
GET /billing-groups/billingGroupName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### billingGroupName

The name of the billing group.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "billingGroupArn": "string",
  "billingGroupId": "string",
  "billingGroupMetadata": {
    "creationDate": number
  },
  "billingGroupName": "string",
```

```
"billingGroupProperties": {  
  "billingGroupDescription": "string"  
},  
"version": number  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [billingGroupArn](#)

The ARN of the billing group.

Type: String

### [billingGroupId](#)

The ID of the billing group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\ - ]+

### [billingGroupMetadata](#)

Additional information about the billing group.

Type: [BillingGroupMetadata](#) object

### [billingGroupName](#)

The name of the billing group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_ - ]+

### [billingGroupProperties](#)

The properties of the billing group.

Type: [BillingGroupProperties](#) object

### [version](#)

The version of the billing group.

Type: Long

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)



- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeCACertificate

Service: Amazon IoT

Describes a registered CA certificate.

Requires permission to access the [DescribeCACertificate](#) action.

## Request Syntax

```
GET /cacertificate/caCertificateId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [caCertificateId](#)

The CA certificate identifier.

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificateDescription": {
    "autoRegistrationStatus": "string",
    "certificateArn": "string",
    "certificateId": "string",
    "certificateMode": "string",
    "certificatePem": "string",
```

```
"creationDate": number,
"customerVersion": number,
"generationId": "string",
"lastModifiedDate": number,
"ownedBy": "string",
"status": "string",
"validity": {
  "notAfter": number,
  "notBefore": number
},
"registrationConfig": {
  "roleArn": "string",
  "templateBody": "string",
  "templateName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificateDescription

The CA certificate description.

Type: [CACertificateDescription](#) object

### registrationConfig

Information about the registration configuration.

Type: [RegistrationConfig](#) object

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

## **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

## **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)

- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeCertificate

Service: Amazon IoT

Gets information about the specified certificate.

Requires permission to access the [DescribeCertificate](#) action.

## Request Syntax

```
GET /certificates/certificateId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [certificateId](#)

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificateDescription": {
    "caCertificateId": "string",
    "certificateArn": "string",
    "certificateId": "string",
    "certificateMode": "string",
    "certificatePem": "string",
    "creationDate": number,
```

```
"customerVersion": number,
"generationId": "string",
"lastModifiedDate": number,
"ownedBy": "string",
"previousOwnedBy": "string",
"status": "string",
"transferData": {
  "acceptDate": number,
  "rejectDate": number,
  "rejectReason": "string",
  "transferDate": number,
  "transferMessage": "string"
},
"validity": {
  "notAfter": number,
  "notBefore": number
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificateDescription

The description of the certificate.

Type: [CertificateDescription](#) object

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)





# DescribeCertificateProvider

Service: Amazon IoT

Describes a certificate provider.

Requires permission to access the [DescribeCertificateProvider](#) action.

## Request Syntax

```
GET /certificate-providers/certificateProviderName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [certificateProviderName](#)

The name of the certificate provider.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "accountDefaultForOperations": [ string ],
  "certificateProviderArn": string,
  "certificateProviderName": string,
  "creationDate": number,
  "lambdaFunctionArn": string,
  "lastModifiedDate": number
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### accountDefaultForOperations

A list of the operations that the certificate provider will use to generate certificates. Valid value: `CreateCertificateFromCsr`.

Type: Array of strings

Array Members: Fixed number of 1 item.

Valid Values: `CreateCertificateFromCsr`

### certificateProviderArn

The ARN of the certificate provider.

Type: String

Length Constraints: Maximum length of 2048.

### certificateProviderName

The name of the certificate provider.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

### creationDate

The date-time string that indicates when the certificate provider was created.

Type: Timestamp

### lambdaFunctionArn

The Lambda function ARN that's associated with the certificate provider.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `[\s\S]*`

### lastModifiedDate

The date-time string that indicates when the certificate provider was last updated.

Type: Timestamp

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

## HTTP Status Code: 401

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeCustomMetric

Service: Amazon IoT

Gets information about a Device Defender detect custom metric.

Requires permission to access the [DescribeCustomMetric](#) action.

## Request Syntax

```
GET /custom-metric/metricName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### metricName

The name of the custom metric.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "creationDate": number,
  "displayName": "string",
  "lastModifiedDate": number,
  "metricArn": "string",
  "metricName": "string",
```

```
"metricType": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### creationDate

The creation date of the custom metric in milliseconds since epoch.

Type: Timestamp

### displayName

Field represents a friendly name in the console for the custom metric; doesn't have to be unique. Don't use this name as the metric identifier in the device metric report. Can be updated.

Type: String

Length Constraints: Maximum length of 128.

Pattern: [\p{Graph}\x20]\*

### lastModifiedDate

The time the custom metric was last modified in milliseconds since epoch.

Type: Timestamp

### metricArn

The Amazon Resource Number (ARN) of the custom metric.

Type: String

### metricName

The name of the custom metric.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

## metricType

The type of the custom metric.

### **Important**

The type `number` only takes a single metric value as an input, but while submitting the metrics value in the DeviceMetrics report, it must be passed as an array with a single value.

Type: String

Valid Values: `string-list` | `ip-address-list` | `number-list` | `number`

## **Errors**

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400



## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeDefaultAuthorizer

Service: Amazon IoT

Describes the default authorizer.

Requires permission to access the [DescribeDefaultAuthorizer](#) action.

## Request Syntax

```
GET /default-authorizer HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "authorizerDescription": {
    "authorizerArn": "string",
    "authorizerFunctionArn": "string",
    "authorizerName": "string",
    "creationDate": number,
    "enableCachingForHttp": boolean,
    "lastModifiedDate": number,
    "signingDisabled": boolean,
    "status": "string",
    "tokenKeyName": "string",
    "tokenSigningPublicKeys": {
      "string" : "string"
    }
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### authorizerDescription

The default authorizer's description.

Type: [AuthorizerDescription](#) object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

## HTTP Status Code: 401

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeDetectMitigationActionsTask

Service: Amazon IoT

Gets information about a Device Defender ML Detect mitigation action.

Requires permission to access the [DescribeDetectMitigationActionsTask](#) action.

## Request Syntax

```
GET /detect/mitigationactions/tasks/taskId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### taskId

The unique identifier of the task.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "taskSummary": {
    "actionsDefinition": [
      {
        "actionParams": {
          "addThingsToThingGroupParams": {
            "overrideDynamicGroups": boolean,
            "thingGroupNames": [ "string" ]
          }
        }
      }
    ]
  }
}
```

```

    },
    "enableIoTLoggingParams": {
      "logLevel": "string",
      "roleArnForLogging": "string"
    },
    "publishFindingToSnsParams": {
      "topicArn": "string"
    },
    "replaceDefaultPolicyVersionParams": {
      "templateName": "string"
    },
    "updateCACertificateParams": {
      "action": "string"
    },
    "updateDeviceCertificateParams": {
      "action": "string"
    }
  },
  "id": "string",
  "name": "string",
  "roleArn": "string"
}
],
"onlyActiveViolationsIncluded": boolean,
"suppressedAlertsIncluded": boolean,
"target": {
  "behaviorName": "string",
  "securityProfileName": "string",
  "violationIds": [ "string" ]
},
"taskEndTime": number,
"taskId": "string",
"taskStartTime": number,
"taskStatistics": {
  "actionsExecuted": number,
  "actionsFailed": number,
  "actionsSkipped": number
},
"taskStatus": "string",
"violationEventOccurrenceRange": {
  "endTime": number,
  "startTime": number
}
}
}

```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [taskSummary](#)

The description of a task.

Type: [DetectMitigationActionsTaskSummary](#) object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# DescribeDimension

Service: Amazon IoT

Provides details about a dimension that is defined in your Amazon Web Services accounts.

Requires permission to access the [DescribeDimension](#) action.

## Request Syntax

```
GET /dimensions/name HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### name

The unique identifier for the dimension.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "arn": "string",
  "creationDate": number,
  "lastModifiedDate": number,
  "name": "string",
  "stringValues": [ "string" ],
  "type": "string"
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### arn

The Amazon Resource Name (ARN) for the dimension.

Type: String

### creationDate

The date the dimension was created.

Type: Timestamp

### lastModifiedDate

The date the dimension was last modified.

Type: Timestamp

### name

The unique identifier for the dimension.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### stringValues

The value or list of values used to scope the dimension. For example, for topic filters, this is the pattern used to match the MQTT topic name.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Length Constraints: Minimum length of 1. Maximum length of 256.

## **type**

The type of the dimension.

Type: String

Valid Values: TOPIC\_FILTER

## **Errors**

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeDomainConfiguration

Service: Amazon IoT

Gets summary information about a domain configuration.

Requires permission to access the [DescribeDomainConfiguration](#) action.

## Request Syntax

```
GET /domainConfigurations/domainConfigurationName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### domainConfigurationName

The name of the domain configuration.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w. :-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "applicationProtocol": "string",
  "authenticationType": "string",
  "authorizerConfig": {
    "allowAuthorizerOverride": boolean,
    "defaultAuthorizerName": "string"
  },
  "clientCertificateConfig": {
```

```

    "clientCertificateCallbackArn": "string"
  },
  "domainConfigurationArn": "string",
  "domainConfigurationName": "string",
  "domainConfigurationStatus": "string",
  "domainName": "string",
  "domainType": "string",
  "lastStatusChangeDate": number,
  "serverCertificateConfig": {
    "enableOCSPCheck": boolean,
    "ocspAuthorizedResponderArn": "string",
    "ocspLambdaArn": "string"
  },
  "serverCertificates": [
    {
      "serverCertificateArn": "string",
      "serverCertificateStatus": "string",
      "serverCertificateStatusDetail": "string"
    }
  ],
  "serviceType": "string",
  "tlsConfig": {
    "securityPolicy": "string"
  }
}

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### applicationProtocol

An enumerated string that specifies the application-layer protocol.

- SECURE\_MQTT - MQTT over TLS.
- MQTT\_WSS - MQTT over WebSocket.
- HTTPS - HTTP over TLS.
- DEFAULT - Use a combination of port and Application Layer Protocol Negotiation (ALPN) to specify application\_layer protocol. For more information, see [Device communication protocols](#).

Type: String

Valid Values: SECURE\_MQTT | MQTT\_WSS | HTTPS | DEFAULT

### authenticationType

An enumerated string that specifies the authentication type.

- CUSTOM\_AUTH\_X509 - Use custom authentication and authorization with additional details from the X.509 client certificate.
- CUSTOM\_AUTH - Use custom authentication and authorization. For more information, see [Custom authentication and authorization](#).
- AWS\_X509 - Use X.509 client certificates without custom authentication and authorization. For more information, see [X.509 client certificates](#).
- AWS\_SIGV4 - Use Amazon Signature Version 4. For more information, see [IAM users, groups, and roles](#).
- DEFAULT - Use a combination of port and Application Layer Protocol Negotiation (ALPN) to specify authentication type. For more information, see [Device communication protocols](#).

Type: String

Valid Values: CUSTOM\_AUTH\_X509 | CUSTOM\_AUTH | AWS\_X509 | AWS\_SIGV4 | DEFAULT

### authorizerConfig

An object that specifies the authorization service for a domain.

Type: [AuthorizerConfig](#) object

### clientCertificateConfig

An object that specifies the client certificate configuration for a domain.

Type: [ClientCertificateConfig](#) object

### domainConfigurationArn

The ARN of the domain configuration.

Type: String

### domainConfigurationName

The name of the domain configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w. :- ]+`

### domainConfigurationStatus

A Boolean value that specifies the current state of the domain configuration.

Type: String

Valid Values: ENABLED | DISABLED

### domainName

The name of the domain.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 253.

Pattern: `[\s\S]*`

### domainType

The type of the domain.

Type: String

Valid Values: ENDPOINT | AWS\_MANAGED | CUSTOMER\_MANAGED

### lastStatusChangeDate

The date and time the domain configuration's status was last changed.

Type: Timestamp

### serverCertificateConfig

The server certificate configuration.

Type: [ServerCertificateConfig](#) object

### serverCertificates

A list containing summary information about the server certificate included in the domain configuration.



Type: Array of [ServerCertificateSummary](#) objects

### [serviceType](#)

The type of service delivered by the endpoint.

Type: String

Valid Values: DATA | CREDENTIAL\_PROVIDER | JOBS

### [tlsConfig](#)

An object that specifies the TLS configuration for a domain.

Type: [TlsConfig](#) object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeEndpoint

Service: Amazon IoT

Returns or creates a unique endpoint specific to the Amazon Web Services account making the call.

## Note

The first time `DescribeEndpoint` is called, an endpoint is created. All subsequent calls to `DescribeEndpoint` return the same endpoint.

Requires permission to access the [DescribeEndpoint](#) action.

## Request Syntax

```
GET /endpoint?endpointType=endpointType HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### endpointType

The endpoint type. Valid endpoint types include:

- `iot:Data` - Returns a VeriSign signed data endpoint.
- `iot:Data-ATS` - Returns an ATS signed data endpoint.
- `iot:CredentialProvider` - Returns an Amazon IoT credentials provider API endpoint.
- `iot:Jobs` - Returns an Amazon IoT device management Jobs API endpoint.

We strongly recommend that customers use the newer `iot:Data-ATS` endpoint type to avoid issues related to the widespread distrust of Symantec certificate authorities. ATS Signed Certificates are more secure and are trusted by most popular browsers.

Length Constraints: Maximum length of 128.

Pattern: `[\s\S]*`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "endpointAddress": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### endpointAddress

The endpoint. The format of the endpoint is as follows: *identifier.iot.region.amazonaws.com*.

Type: String

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeEventConfigurations

Service: Amazon IoT

Describes event configurations.

Requires permission to access the [DescribeEventConfigurations](#) action.

## Request Syntax

```
GET /event-configurations HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "creationDate": number,
  "eventConfigurations": {
    "string" : {
      "Enabled": boolean
    }
  },
  "lastModifiedDate": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [creationDate](#)

The creation date of the event configuration.

Type: Timestamp

### eventConfigurations

The event configurations.

Type: String to [Configuration](#) object map

Valid Keys: THING | THING\_GROUP | THING\_TYPE | THING\_GROUP\_MEMBERSHIP | THING\_GROUP\_HIERARCHY | THING\_TYPE\_ASSOCIATION | JOB | JOB\_EXECUTION | POLICY | CERTIFICATE | CA\_CERTIFICATE

### lastModifiedDate

The date the event configurations were last modified.

Type: Timestamp

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# DescribeFleetMetric

Service: Amazon IoT

Gets information about the specified fleet metric.

Requires permission to access the [DescribeFleetMetric](#) action.

## Request Syntax

```
GET /fleet-metric/metricName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### metricName

The name of the fleet metric to describe.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_\-\. ]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "aggregationField": "string",
  "aggregationType": {
    "name": "string",
    "values": [ "string" ]
  },
  "creationDate": number,
```

```
"description": "string",
"indexName": "string",
"lastModifiedDate": number,
"metricArn": "string",
"metricName": "string",
"period": number,
"queryString": "string",
"queryVersion": "string",
"unit": "string",
"version": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### aggregationField

The field to aggregate.

Type: String

Length Constraints: Minimum length of 1.

### aggregationType

The type of the aggregation query.

Type: [AggregationType](#) object

### creationDate

The date when the fleet metric is created.

Type: Timestamp

### description

The fleet metric description.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `[\p{Graph}\x20]*`

### indexName

The name of the index to search.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

### lastModifiedDate

The date when the fleet metric is last modified.

Type: Timestamp

### metricArn

The ARN of the fleet metric to describe.

Type: String

### metricName

The name of the fleet metric to describe.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9_-\.\ ]+`

### period

The time in seconds between fleet metric emissions. Range [60(1 min), 86400(1 day)] and must be multiple of 60.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 86400.

### queryString

The search query string.

Type: String

Length Constraints: Minimum length of 1.

### queryVersion

The query version.

Type: String

### unit

Used to support unit transformation such as milliseconds to seconds. The unit must be supported by [CW metric](#).

Type: String

Valid Values: Seconds | Microseconds | Milliseconds | Bytes | Kilobytes | Megabytes | Gigabytes | Terabytes | Bits | Kilobits | Megabits | Gigabits | Terabits | Percent | Count | Bytes/Second | Kilobytes/Second | Megabytes/Second | Gigabytes/Second | Terabytes/Second | Bits/Second | Kilobits/Second | Megabits/Second | Gigabits/Second | Terabits/Second | Count/Second | None

### version

The version of the fleet metric.

Type: Long

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeIndex

Service: Amazon IoT

Describes a search index.

Requires permission to access the [DescribeIndex](#) action.

## Request Syntax

```
GET /indices/indexName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### indexName

The index name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "indexName": "string",
  "indexStatus": "string",
  "schema": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### indexName

The index name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

### indexStatus

The index status.

Type: String

Valid Values: ACTIVE | BUILDING | REBUILDING

### schema

Contains a value that specifies the type of indexing performed. Valid values are:

- REGISTRY – Your thing index contains only registry data.
- REGISTRY\_AND\_SHADOW - Your thing index contains registry data and shadow data.
- REGISTRY\_AND\_CONNECTIVITY\_STATUS - Your thing index contains registry data and thing connectivity status data.
- REGISTRY\_AND\_SHADOW\_AND\_CONNECTIVITY\_STATUS - Your thing index contains registry data, shadow data, and thing connectivity status data.
- MULTI\_INDEXING\_MODE - Your thing index contains multiple data sources. For more information, see [GetIndexingConfiguration](#).

Type: String

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)



- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeJob

Service: Amazon IoT

Describes a job.

Requires permission to access the [DescribeJob](#) action.

## Request Syntax

```
GET /jobs/jobId?beforeSubstitution=beforeSubstitution HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [beforeSubstitution](#)

Provides a view of the job document before and after the substitution parameters have been resolved with their exact values.

### [jobId](#)

The unique identifier you assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9_-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "documentSource": "string",
  "job": {
    "abortConfig": {
```

```
    "criteriaList": [
      {
        "action": "string",
        "failureType": "string",
        "minNumberOfExecutedThings": number,
        "thresholdPercentage": number
      }
    ]
  },
  "comment": "string",
  "completedAt": number,
  "createdAt": number,
  "description": "string",
  "destinationPackageVersions": [ "string" ],
  "documentParameters": {
    "string" : "string"
  },
  "forceCanceled": boolean,
  "isConcurrent": boolean,
  "jobArn": "string",
  "jobExecutionsRetryConfig": {
    "criteriaList": [
      {
        "failureType": "string",
        "numberOfRetries": number
      }
    ]
  },
  "jobExecutionsRolloutConfig": {
    "exponentialRate": {
      "baseRatePerMinute": number,
      "incrementFactor": number,
      "rateIncreaseCriteria": {
        "numberOfNotifiedThings": number,
        "numberOfSucceededThings": number
      }
    }
  },
  "maximumPerMinute": number
},
"jobId": "string",
"jobProcessDetails": {
  "numberOfCanceledThings": number,
  "numberOfFailedThings": number,
  "numberOfInProgressThings": number,
```

```
    "numberOfQueuedThings": number,
    "numberOfRejectedThings": number,
    "numberOfRemovedThings": number,
    "numberOfSucceededThings": number,
    "numberOfTimedOutThings": number,
    "processingTargets": [ "string" ]
  },
  "jobTemplateArn": "string",
  "lastUpdatedAt": number,
  "namespaceId": "string",
  "presignedUrlConfig": {
    "expiresInSec": number,
    "roleArn": "string"
  },
  "reasonCode": "string",
  "scheduledJobRollouts": [
    {
      "startTime": "string"
    }
  ],
  "schedulingConfig": {
    "endBehavior": "string",
    "endTime": "string",
    "maintenanceWindows": [
      {
        "durationInMinutes": number,
        "startTime": "string"
      }
    ]
  },
  "startTime": "string"
},
"status": "string",
"targets": [ "string" ],
"targetSelection": "string",
"timeoutConfig": {
  "inProgressTimeoutInMinutes": number
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### documentSource

An S3 link to the job document.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1350.

### job

Information about the job.

Type: [Job](#) object

## Errors

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeJobExecution

Service: Amazon IoT

Describes a job execution.

Requires permission to access the [DescribeJobExecution](#) action.

## Request Syntax

```
GET /things/thingName/jobs/jobId?executionNumber=executionNumber HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### executionNumber

A string (consisting of the digits "0" through "9" which is used to specify a particular job execution on a particular device.

### jobId

The unique identifier you assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

### thingName

The name of the thing on which the job execution is running.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "execution": {
    "approximateSecondsBeforeTimedOut": number,
    "executionNumber": number,
    "forceCanceled": boolean,
    "jobId": "string",
    "lastUpdatedAt": number,
    "queuedAt": number,
    "startedAt": number,
    "status": "string",
    "statusDetails": {
      "detailsMap": {
        "string" : "string"
      }
    },
    "thingArn": "string",
    "versionNumber": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### execution

Information about the job execution.

Type: [JobExecution](#) object

## Errors

### InvalidRequestException

The request is not valid.



HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeJobTemplate

Service: Amazon IoT

Returns information about a job template.

## Request Syntax

```
GET /job-templates/jobTemplateId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### jobTemplateId

The unique identifier of the job template.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "abortConfig": {
    "criteriaList": [
      {
        "action": "string",
        "failureType": "string",
        "minNumberOfExecutedThings": number,
        "thresholdPercentage": number
      }
    ]
  }
}
```

```
},
"createdAt": number,
"description": "string",
"destinationPackageVersions": [ "string" ],
"document": "string",
"documentSource": "string",
"jobExecutionsRetryConfig": {
  "criteriaList": [
    {
      "failureType": "string",
      "numberOfRetries": number
    }
  ]
},
"jobExecutionsRolloutConfig": {
  "exponentialRate": {
    "baseRatePerMinute": number,
    "incrementFactor": number,
    "rateIncreaseCriteria": {
      "numberOfNotifiedThings": number,
      "numberOfSucceededThings": number
    }
  },
  "maximumPerMinute": number
},
"jobTemplateArn": "string",
"jobTemplateId": "string",
"maintenanceWindows": [
  {
    "durationInMinutes": number,
    "startTime": "string"
  }
],
"presignedUrlConfig": {
  "expiresInSec": number,
  "roleArn": "string"
},
"timeoutConfig": {
  "inProgressTimeoutInMinutes": number
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### abortConfig

The criteria that determine when and how a job abort takes place.

Type: [AbortConfig](#) object

### createdAt

The time, in seconds since the epoch, when the job template was created.

Type: Timestamp

### description

A description of the job template.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

### destinationPackageVersions

The package version Amazon Resource Names (ARNs) that are installed on the device when the job successfully completes. The package version must be in either the Published or Deprecated state when the job deploys. For more information, see [Package version lifecycle](#).

**Note:**The following Length Constraints relates to a single ARN. Up to 25 package version ARNs are allowed.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

### document

The job document.

Type: String

Length Constraints: Maximum length of 32768.

### documentSource

An S3 link to the job document.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1350.

### jobExecutionsRetryConfig

The configuration that determines how many retries are allowed for each failure type for a job.

Type: [JobExecutionsRetryConfig](#) object

### jobExecutionsRolloutConfig

Allows you to create a staged rollout of a job.

Type: [JobExecutionsRolloutConfig](#) object

### jobTemplateArn

The ARN of the job template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

### jobTemplateId

The unique identifier of the job template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9_-]+`

### maintenanceWindows

Allows you to configure an optional maintenance window for the rollout of a job document to all devices in the target group for a job.

Type: Array of [MaintenanceWindow](#) objects

### [presignedUrlConfig](#)

Configuration for pre-signed S3 URLs.

Type: [PresignedUrlConfig](#) object

### [timeoutConfig](#)

Specifies the amount of time each device has to finish its execution of the job. A timer is started when the job execution status is set to IN\_PROGRESS. If the job execution status is not set to another terminal state before the timer expires, it will be automatically set to TIMED\_OUT.

Type: [TimeoutConfig](#) object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeManagedJobTemplate

Service: Amazon IoT

View details of a managed job template.

## Request Syntax

```
GET /managed-job-templates/templateName?templateVersion=templateVersion HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### templateName

The unique name of a managed job template, which is required.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

### templateVersion

An optional parameter to specify version of a managed template. If not specified, the pre-defined default version is returned.

Pattern: `^[1-9]+.[0-9]+`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "description": "string",
  "document": "string",
```



```
"documentParameters": [
  {
    "description": "string",
    "example": "string",
    "key": "string",
    "optional": boolean,
    "regex": "string"
  }
],
"environments": [ "string" ],
"templateArn": "string",
"templateName": "string",
"templateVersion": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### description

The unique description of a managed template.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

### document

The document schema for a managed job template.

Type: String

Length Constraints: Maximum length of 32768.

### documentParameters

A map of key-value pairs that you can use as guidance to specify the inputs for creating a job from a managed template.

**Note**

`documentParameters` can only be used when creating jobs from Amazon managed templates. This parameter can't be used with custom job templates or to create jobs from them.

Type: Array of [DocumentParameter](#) objects

**environments**

A list of environments that are supported with the managed job template.

Type: Array of strings

Pattern: `[\p{C}]+`

**templateArn**

The unique Amazon Resource Name (ARN) of the managed template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

**templateName**

The unique name of a managed template, such as `AWS-Reboot`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

**templateVersion**

The version for a managed template.

Type: String

Pattern: `^[1-9]+.[0-9]+`

## Errors

### InternalServerError

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# DescribeMitigationAction

Service: Amazon IoT

Gets information about a mitigation action.

Requires permission to access the [DescribeMitigationAction](#) action.

## Request Syntax

```
GET /mitigationactions/actions/actionName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [actionName](#)

The friendly name that uniquely identifies the mitigation action.

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "actionArn": "string",
  "actionId": "string",
  "actionName": "string",
  "actionParams": {
    "addThingsToThingGroupParams": {
```

```
    "overrideDynamicGroups": boolean,
    "thingGroupNames": [ "string" ]
  },
  "enableIoTLoggingParams": {
    "logLevel": "string",
    "roleArnForLogging": "string"
  },
  "publishFindingToSnsParams": {
    "topicArn": "string"
  },
  "replaceDefaultPolicyVersionParams": {
    "templateName": "string"
  },
  "updateCACertificateParams": {
    "action": "string"
  },
  "updateDeviceCertificateParams": {
    "action": "string"
  }
},
"actionType": "string",
"creationDate": number,
"lastModifiedDate": number,
"roleArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### actionArn

The ARN that identifies this migration action.

Type: String

### actionId

A unique identifier for this action.

Type: String

### actionName

The friendly name that uniquely identifies the mitigation action.

Type: String

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

### actionParams

Parameters that control how the mitigation action is applied, specific to the type of mitigation action.

Type: [MitigationActionParams](#) object

### actionType

The type of mitigation action.

Type: String

Valid Values: UPDATE\_DEVICE\_CERTIFICATE | UPDATE\_CA\_CERTIFICATE | ADD\_THINGS\_TO\_THING\_GROUP | REPLACE\_DEFAULT\_POLICY\_VERSION | ENABLE\_IOT\_LOGGING | PUBLISH\_FINDING\_TO\_SNS

### creationDate

The date and time when the mitigation action was added to your Amazon Web Services accounts.

Type: Timestamp

### lastModifiedDate

The date and time when the mitigation action was last changed.

Type: Timestamp

### roleArn

The ARN of the IAM role used to apply this action.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)



- [Amazon SDK for Ruby V3](#)

# DescribeProvisioningTemplate

Service: Amazon IoT

Returns information about a provisioning template.

Requires permission to access the [DescribeProvisioningTemplate](#) action.

## Request Syntax

```
GET /provisioning-templates/templateName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [templateName](#)

The name of the provisioning template.

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "creationDate": number,
  "defaultVersionId": number,
  "description": "string",
  "enabled": boolean,
  "lastModifiedDate": number,
  "preProvisioningHook": {
    "payloadVersion": "string",
```

```
    "targetArn": "string"
  },
  "provisioningRoleArn": "string",
  "templateArn": "string",
  "templateBody": "string",
  "templateName": "string",
  "type": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### creationDate

The date when the provisioning template was created.

Type: Timestamp

### defaultVersionId

The default fleet template version ID.

Type: Integer

### description

The description of the provisioning template.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

Pattern: `[^\p{C}]*`

### enabled

True if the provisioning template is enabled, otherwise false.

Type: Boolean

### lastModifiedDate

The date when the provisioning template was last modified.

Type: Timestamp

### [preProvisioningHook](#)

Gets information about a pre-provisioned hook.

Type: [ProvisioningHook](#) object

### [provisioningRoleArn](#)

The ARN of the role associated with the provisioning template. This IoT role grants permission to provision a device.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

### [templateArn](#)

The ARN of the provisioning template.

Type: String

### [templateBody](#)

The JSON formatted contents of the provisioning template.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 10240.

Pattern: `[\s\S]*`

### [templateName](#)

The name of the provisioning template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

### [type](#)

The type you define in a provisioning template. You can create a template with only one type. You can't change the template type after its creation. The default value is

FLEET\_PROVISIONING. For more information about provisioning template, see: [Provisioning template](#).

Type: String

Valid Values: FLEET\_PROVISIONING | JITP

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeProvisioningTemplateVersion

Service: Amazon IoT

Returns information about a provisioning template version.

Requires permission to access the [DescribeProvisioningTemplateVersion](#) action.

## Request Syntax

```
GET /provisioning-templates/templateName/versions/versionId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### templateName

The template name.

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

Required: Yes

### versionId

The provisioning template version ID.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "creationDate": number,
```

```
"isDefaultVersion": boolean,  
"templateBody": "string",  
"versionId": number  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### creationDate

The date when the provisioning template version was created.

Type: Timestamp

### isDefaultVersion

True if the provisioning template version is the default version.

Type: Boolean

### templateBody

The JSON formatted contents of the provisioning template version.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 10240.

Pattern: `[\s\S]*`

### versionId

The provisioning template version ID.

Type: Integer

## Errors

### **InternalFailureException**

An unexpected error has occurred.



HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# DescribeRoleAlias

Service: Amazon IoT

Describes a role alias.

Requires permission to access the [DescribeRoleAlias](#) action.

## Request Syntax

```
GET /role-aliases/roleAlias HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [roleAlias](#)

The role alias to describe.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "roleAliasDescription": {
    "creationDate": number,
    "credentialDurationSeconds": number,
    "lastModifiedDate": number,
    "owner": "string",
    "roleAlias": "string",
    "roleAliasArn": "string",
```

```
    "roleArn": "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [roleAliasDescription](#)

The role alias description.

Type: [RoleAliasDescription](#) object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeScheduledAudit

Service: Amazon IoT

Gets information about a scheduled audit.

Requires permission to access the [DescribeScheduledAudit](#) action.

## Request Syntax

```
GET /audit/scheduledaudits/scheduledAuditName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [scheduledAuditName](#)

The name of the scheduled audit whose information you want to get.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "dayOfMonth": "string",
  "dayOfWeek": "string",
  "frequency": "string",
  "scheduledAuditArn": "string",
  "scheduledAuditName": "string",
  "targetCheckNames": [ "string" ]
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### dayOfMonth

The day of the month on which the scheduled audit takes place. This is will be 1 through 31 or LAST. If days 29-31 are specified, and the month does not have that many days, the audit takes place on the LAST day of the month.

Type: String

Pattern: `^([1-9]| [12][0-9]|3[01])$|^LAST$`

### dayOfWeek

The day of the week on which the scheduled audit takes place, either one of SUN, MON, TUE, WED, THU, FRI, or SAT.

Type: String

Valid Values: SUN | MON | TUE | WED | THU | FRI | SAT

### frequency

How often the scheduled audit takes place, either one of DAILY, WEEKLY, BIWEEKLY, or MONTHLY. The start time of each audit is determined by the system.

Type: String

Valid Values: DAILY | WEEKLY | BIWEEKLY | MONTHLY

### scheduledAuditArn

The ARN of the scheduled audit.

Type: String

### scheduledAuditName

The name of the scheduled audit.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

### targetCheckNames

Which checks are performed during the scheduled audit. Checks must be enabled for your account. (Use `DescribeAccountAuditConfiguration` to see the list of all checks, including those that are enabled or use `UpdateAccountAuditConfiguration` to select which checks are enabled.)

Type: Array of strings

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:



- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeSecurityProfile

Service: Amazon IoT

Gets information about a Device Defender security profile.

Requires permission to access the [DescribeSecurityProfile](#) action.

## Request Syntax

```
GET /security-profiles/securityProfileName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### securityProfileName

The name of the security profile whose information you want to get.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "additionalMetricsToRetain": [ string ],
  "additionalMetricsToRetainV2": [
    {
      "exportMetric": boolean,
      "metric": string,
      "metricDimension": {
        "dimensionName": string,

```

```

        "operator": "string"
    }
}
],
"alertTargets": {
    "string" : {
        "alertTargetArn": "string",
        "roleArn": "string"
    }
},
"behaviors": [
    {
        "criteria": {
            "comparisonOperator": "string",
            "consecutiveDatapointsToAlarm": number,
            "consecutiveDatapointsToClear": number,
            "durationSeconds": number,
            "mlDetectionConfig": {
                "confidenceLevel": "string"
            },
            "statisticalThreshold": {
                "statistic": "string"
            },
        },
        "value": {
            "cidrs": [ "string" ],
            "count": number,
            "number": number,
            "numbers": [ number ],
            "ports": [ number ],
            "strings": [ "string" ]
        }
    },
    "exportMetric": boolean,
    "metric": "string",
    "metricDimension": {
        "dimensionName": "string",
        "operator": "string"
    },
    "name": "string",
    "suppressAlerts": boolean
}
],
"creationDate": number,
"lastModifiedDate": number,

```

```
"metricsExportConfig": {
  "mqttTopic": "string",
  "roleArn": "string"
},
"securityProfileArn": "string",
"securityProfileDescription": "string",
"securityProfileName": "string",
"version": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### additionalMetricsToRetain

*This parameter has been deprecated.*

Please use [DescribeSecurityProfile:additionalMetricsToRetainV2](#) instead.

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the profile's behaviors, but it is also retained for any metric specified here.

Type: Array of strings

### additionalMetricsToRetainV2

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the profile's behaviors, but it is also retained for any metric specified here.

Type: Array of [MetricToRetain](#) objects

### alertTargets

Where the alerts are sent. (Alerts are always sent to the console.)

Type: String to [AlertTarget](#) object map

Valid Keys: SNS

### behaviors

Specifies the behaviors that, when violated by a device (thing), cause an alert.

Type: Array of [Behavior](#) objects

Array Members: Maximum number of 100 items.

### [creationDate](#)

The time the security profile was created.

Type: Timestamp

### [lastModifiedDate](#)

The time the security profile was last modified.

Type: Timestamp

### [metricsExportConfig](#)

Specifies the MQTT topic and role ARN required for metric export.

Type: [MetricsExportConfig](#) object

### [securityProfileArn](#)

The ARN of the security profile.

Type: String

### [securityProfileDescription](#)

A description of the security profile (associated with the security profile when it was created or updated).

Type: String

Length Constraints: Maximum length of 1000.

Pattern: `[\p{Graph}\x20]*`

### [securityProfileName](#)

The name of the security profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

## version

The version of the security profile. A new version is generated whenever the security profile is updated.

Type: Long

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeStream

Service: Amazon IoT

Gets information about a stream.

Requires permission to access the [DescribeStream](#) action.

## Request Syntax

```
GET /streams/streamId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [streamId](#)

The stream ID.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "streamInfo": {
    "createdAt": number,
    "description": "string",
    "files": [
      {
        "fileId": number,
```



```
        "s3Location": {
            "bucket": "string",
            "key": "string",
            "version": "string"
        }
    ],
    "lastUpdatedAt": number,
    "roleArn": "string",
    "streamArn": "string",
    "streamId": "string",
    "streamVersion": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### streamInfo

Information about the stream.

Type: [StreamInfo](#) object

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeThing

Service: Amazon IoT

Gets information about the specified thing.

Requires permission to access the [DescribeThing](#) action.

## Request Syntax

```
GET /things/thingName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### thingName

The name of the thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "attributes": {
    "string" : "string"
  },
  "billingGroupName": "string",
  "defaultClientId": "string",
  "thingArn": "string",
```

```
"thingId": "string",  
"thingName": "string",  
"thingTypeName": "string",  
"version": number  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### attributes

The thing attributes.

Type: String to string map

Key Length Constraints: Maximum length of 128.

Key Pattern: [a-zA-Z0-9\_.,@/:#-]+

Value Length Constraints: Maximum length of 800.

Value Pattern: [a-zA-Z0-9\_.,@/:#=\[\]-]\*

### billingGroupName

The name of the billing group the thing belongs to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### defaultClientId

The default MQTT client ID. For a typical device, the thing name is also used as the default MQTT client ID. Although we don't require a mapping between a thing's registry name and its use of MQTT client IDs, certificates, or shadow state, we recommend that you choose a thing name and use it as the MQTT client ID for the registry and the Device Shadow service.

This lets you better organize your Amazon IoT fleet without removing the flexibility of the underlying device certificate model or shadows.

Type: String

### thingArn

The ARN of the thing to describe.

Type: String

### thingId

The ID of the thing to describe.

Type: String

### thingName

The name of the thing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### thingTypeName

The thing type name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### version

The current version of the thing record in the registry.

#### **Note**

To avoid unintentional changes to the information in the registry, you can pass the version information in the `expectedVersion` parameter of the `UpdateThing` and `DeleteThing` calls.

Type: Long

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)

- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeThingGroup

Service: Amazon IoT

Describe a thing group.

Requires permission to access the [DescribeThingGroup](#) action.

## Request Syntax

```
GET /thing-groups/thingGroupName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [thingGroupName](#)

The name of the thing group.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "indexName": "string",
  "queryString": "string",
  "queryVersion": "string",
  "status": "string",
  "thingGroupArn": "string",
  "thingGroupId": "string",
```



```

"thingGroupMetadata": {
  "creationDate": number,
  "parentGroupName": "string",
  "rootToParentThingGroups": [
    {
      "groupArn": "string",
      "groupName": "string"
    }
  ]
},
"thingGroupName": "string",
"thingGroupProperties": {
  "attributePayload": {
    "attributes": {
      "string" : "string"
    },
    "merge": boolean
  },
  "thingGroupDescription": "string"
},
"version": number
}

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### indexName

The dynamic thing group index name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### queryString

The dynamic thing group search query string.

Type: String

Length Constraints: Minimum length of 1.

### queryVersion

The dynamic thing group query version.

Type: String

### status

The dynamic thing group status.

Type: String

Valid Values: ACTIVE | BUILDING | REBUILDING

### thingGroupArn

The thing group ARN.

Type: String

### thingGroupId

The thing group ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\ - ]+

### thingGroupMetadata

Thing group metadata.

Type: [ThingGroupMetadata](#) object

### thingGroupName

The name of the thing group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_ - ]+

## [thingGroupProperties](#)

The thing group properties.

Type: [ThingGroupProperties](#) object

### [version](#)

The version of the thing group.

Type: Long

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)

- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeThingRegistrationTask

Service: Amazon IoT

Describes a bulk thing provisioning task.

Requires permission to access the [DescribeThingRegistrationTask](#) action.

## Request Syntax

```
GET /thing-registration-tasks/taskId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### taskId

The task ID.

Length Constraints: Maximum length of 40.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "creationDate": number,
  "failureCount": number,
  "inputFileBucket": "string",
  "inputFileKey": "string",
  "lastModifiedDate": number,
  "message": "string",
  "percentageProgress": number,
```

```
"roleArn": "string",  
"status": "string",  
"successCount": number,  
"taskId": "string",  
"templateBody": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### creationDate

The task creation date.

Type: Timestamp

### failureCount

The number of things that failed to be provisioned.

Type: Integer

### inputFileBucket

The S3 bucket that contains the input file.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 256.

Pattern: [a-zA-Z0-9.\_-]+

### inputFileKey

The input file key.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: [a-zA-Z0-9!\_.\*'()-\~/]+

### lastModifiedDate

The date when the task was last modified.

Type: Timestamp

### message

The message.

Type: String

Length Constraints: Maximum length of 2048.

### percentageProgress

The progress of the bulk provisioning task expressed as a percentage.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

### roleArn

The role ARN that grants access to the input file bucket.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

### status

The status of the bulk thing provisioning task.

Type: String

Valid Values: InProgress | Completed | Failed | Cancelled | Cancelling

### successCount

The number of things successfully provisioned.

Type: Integer

### taskId

The task ID.

Type: String

Length Constraints: Maximum length of 40.

### templateBody

The task's template.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 10240.

Pattern: `[\s\S]*`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401



## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeThingType

Service: Amazon IoT

Gets information about the specified thing type.

Requires permission to access the [DescribeThingType](#) action.

## Request Syntax

```
GET /thing-types/thingTypeName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### thingTypeName

The name of the thing type.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "thingTypeArn": string,
  "thingTypeId": string,
  "thingTypeMetadata": {
    "creationDate": number,
    "deprecated": boolean,
    "deprecationDate": number
  },
}
```

```
"thingTypeName": "string",
"thingTypeProperties": {
  "mqtt5Configuration": {
    "propagatingAttributes": [
      {
        "connectionAttribute": "string",
        "thingAttribute": "string",
        "userPropertyKey": "string"
      }
    ]
  },
  "searchableAttributes": [ "string" ],
  "thingTypeDescription": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [thingTypeArn](#)

The thing type ARN.

Type: String

### [thingTypeId](#)

The thing type ID.

Type: String

### [thingTypeMetadata](#)

The ThingTypeMetadata contains additional information about the thing type including: creation date and time, a value indicating whether the thing type is deprecated, and a date and time when it was deprecated.

Type: [ThingTypeMetadata](#) object

### [thingTypeName](#)

The name of the thing type.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### [thingTypeProperties](#)

The ThingTypeProperties contains information about the thing type including description, a list of searchable thing attribute names, and MQTT5 configuration.

Type: [ThingTypeProperties](#) object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DetachPolicy

Service: Amazon IoT

Detaches a policy from the specified target.

## Note

Because of the distributed nature of Amazon, it can take up to five minutes after a policy is detached before it's ready to be deleted.

Requires permission to access the [DetachPolicy](#) action.

## Request Syntax

```
POST /target-policies/policyName HTTP/1.1
Content-type: application/json

{
  "target": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### policyName

The policy to detach.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

## **target**

The target from which the policy will be detached.

Type: String

Required: Yes

## **Response Syntax**

```
HTTP/1.1 200
```

## **Response Elements**

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## **Errors**

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# DetachPrincipalPolicy

Service: Amazon IoT

Removes the specified policy from the specified certificate.

**Note:** This action is deprecated and works as expected for backward compatibility, but we won't add enhancements. Use [DetachPolicy](#) instead.

Requires permission to access the [DetachPrincipalPolicy](#) action.

## Request Syntax

```
DELETE /principal-policies/policyName HTTP/1.1
x-amzn-iot-principal: principal
```

## URI Request Parameters

The request uses the following URI parameters.

### [policyName](#)

The name of the policy to detach.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

### [principal](#)

The principal.

Valid principals are CertificateArn (`arn:aws:iot:region:accountId:cert/certificateId`), thingGroupArn (`arn:aws:iot:region:accountId:thinggroup/groupName`) and CognitoId (`region:id`).

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DetachSecurityProfile

Service: Amazon IoT

Disassociates a Device Defender security profile from a thing group or from this account.

Requires permission to access the [DetachSecurityProfile](#) action.

## Request Syntax

```
DELETE /security-profiles/securityProfileName/targets?  
securityProfileTargetArn=securityProfileTargetArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [securityProfileName](#)

The security profile that is detached.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

### [securityProfileTargetArn](#)

The ARN of the thing group from which the security profile is detached.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)

- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DetachThingPrincipal

Service: Amazon IoT

Detaches the specified principal from the specified thing. A principal can be X.509 certificates, IAM users, groups, and roles, Amazon Cognito identities or federated identities.

## Note

This call is asynchronous. It might take several seconds for the detachment to propagate.

Requires permission to access the [DetachThingPrincipal](#) action.

## Request Syntax

```
DELETE /things/thingName/principals HTTP/1.1
x-amzn-principal: principal
```

## URI Request Parameters

The request uses the following URI parameters.

### principal

If the principal is a certificate, this value must be ARN of the certificate. If the principal is an Amazon Cognito identity, this value must be the ID of the Amazon Cognito identity.

Required: Yes

### thingName

The name of the thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_- ]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401



## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DisableTopicRule

Service: Amazon IoT

Disables the rule.

Requires permission to access the [DisableTopicRule](#) action.

## Request Syntax

```
POST /rules/ruleName/disable HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### ruleName

The name of the rule to disable.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^[a-zA-Z0-9_]+$`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ConflictingResourceUpdateException

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DisassociateSbomFromPackageVersion

Service: Amazon IoT

Disassociates the selected software bill of materials (SBOM) from a specific software package version.

Requires permission to access the [DisassociateSbomWithPackageVersion](#) action.

## Request Syntax

```
DELETE /packages/packageName/versions/versionName/sbom?clientToken=clientToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [clientToken](#)

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

### [packageName](#)

The name of the new software package.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_.]+`

Required: Yes

### [versionName](#)

The name of the new package version.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9-_.]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ConflictException

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### InternalServerError

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# EnableTopicRule

Service: Amazon IoT

Enables the rule.

Requires permission to access the [EnableTopicRule](#) action.

## Request Syntax

```
POST /rules/ruleName/enable HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### ruleName

The name of the topic rule to enable.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^[a-zA-Z0-9_]+$`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.



## Errors

### ConflictingResourceUpdateException

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetBehaviorModelTrainingSummaries

Service: Amazon IoT

Returns a Device Defender's ML Detect Security Profile training model's status.

Requires permission to access the [GetBehaviorModelTrainingSummaries](#) action.

## Request Syntax

```
GET /behavior-model-training/summaries?  
maxResults=maxResults&nextToken=nextToken&securityProfileName=securityProfileName  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time. The default is 10.

Valid Range: Minimum value of 1. Maximum value of 10.

### [nextToken](#)

The token for the next set of results.

### [securityProfileName](#)

The name of the security profile.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "nextToken": "string",
  "summaries": [
    {
      "behaviorName": "string",
      "datapointsCollectionPercentage": number,
      "lastModelRefreshDate": number,
      "modelStatus": "string",
      "securityProfileName": "string",
      "trainingDataCollectionStartDate": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token that can be used to retrieve the next set of results, or null if there are no additional results.

Type: String

### summaries

A list of all ML Detect behaviors and their model status for a given Security Profile.

Type: Array of [BehaviorModelTrainingSummary](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

## InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetBucketsAggregation

Service: Amazon IoT

Aggregates on indexed data with search queries pertaining to particular fields.

Requires permission to access the [GetBucketsAggregation](#) action.

## Request Syntax

```
POST /indices/buckets HTTP/1.1
Content-type: application/json

{
  "aggregationField": "string",
  "bucketsAggregationType": {
    "termsAggregation": {
      "maxBuckets": number
    }
  },
  "indexName": "string",
  "queryString": "string",
  "queryVersion": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [aggregationField](#)

The aggregation field.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

## bucketsAggregationType

The basic control of the response shape and the bucket aggregation type to perform.

Type: [BucketsAggregationType](#) object

Required: Yes

## indexName

The name of the index to search.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

## queryString

The search query string.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

## queryVersion

The version of the query.

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "buckets": [
```

```
{
  {
    "count": number,
    "keyValue": "string"
  }
],
"totalCount": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### buckets

The main part of the response with a list of buckets. Each bucket contains a `keyValue` and a `count`.

`keyValue`: The aggregation field value counted for the particular bucket.

`count`: The number of documents that have that value.

Type: Array of [Bucket](#) objects

### totalCount

The total number of things that fit the query string criteria.

Type: Integer

## Errors

### **IndexNotReadyException**

The index is not ready.

HTTP Status Code: 400

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500



### **InvalidAggregationException**

The aggregation is invalid.

HTTP Status Code: 400

### **InvalidQueryException**

The query is invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetCardinality

Service: Amazon IoT

Returns the approximate count of unique values that match the query.

Requires permission to access the [GetCardinality](#) action.

## Request Syntax

```
POST /indices/cardinality HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "aggregationField": "string",
  "indexName": "string",
  "queryString": "string",
  "queryVersion": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [aggregationField](#)

The field to aggregate.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### [indexName](#)

The name of the index to search.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### queryString

The search query string.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### queryVersion

The query version.

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "cardinality": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### cardinality

The approximate count of unique values that match the query.

Type: Integer

## Errors

### **IndexNotReadyException**

The index is not ready.

HTTP Status Code: 400

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidAggregationException**

The aggregation is invalid.

HTTP Status Code: 400

### **InvalidQueryException**

The query is invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetCommand

Service: Amazon IoT

Gets information about the specified command.

## Request Syntax

```
GET /commands/commandId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### commandId

The unique identifier of the command for which you want to retrieve information.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200  
Content-type: application/json
```

```
{  
  "commandArn": "string",  
  "commandId": "string",  
  "createdAt": number,  
  "deprecated": boolean,  
  "description": "string",  
  "displayName": "string",  
  "lastUpdatedAt": number,  
  "mandatoryParameters": [  
    {
```

```

    "defaultValue": {
      "B": boolean,
      "BIN": blob,
      "D": number,
      "I": number,
      "L": number,
      "S": "string",
      "UL": "string"
    },
    "description": "string",
    "name": "string",
    "value": {
      "B": boolean,
      "BIN": blob,
      "D": number,
      "I": number,
      "L": number,
      "S": "string",
      "UL": "string"
    }
  }
},
"namespace": "string",
"payload": {
  "content": blob,
  "contentType": "string"
},
"pendingDeletion": boolean,
"roleArn": "string"
}

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### commandArn

The Amazon Resource Number (ARN) of the command. For example, `arn:aws:iot:<region>:<accountid>:command/<commandId>`

Type: String



### commandId

The unique identifier of the command.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

### createdAt

The timestamp, when the command was created.

Type: Timestamp

### deprecated

Indicates whether the command has been deprecated.

Type: Boolean

### description

A short text description of the command.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]\*

### displayName

The user-friendly name in the console for the command.

Type: String

Length Constraints: Maximum length of 64.

Pattern: [^\p{C}]\*

### lastUpdatedAt

The timestamp, when the command was last updated.

Type: Timestamp

## mandatoryParameters

A list of parameters for the command created.

Type: Array of [CommandParameter](#) objects

Array Members: Minimum number of 1 item.

## namespace

The namespace of the command.

Type: String

Valid Values: AWS-IoT | AWS-IoT-FleetWise

## payload

The payload object that you provided for the command.

Type: [CommandPayload](#) object

## pendingDeletion

Indicates whether the command is being deleted.

Type: Boolean

## roleArn

The IAM role that you provided when creating the command with AWS-IoT-FleetWise as the namespace.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

## Errors

### InternalServerError

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetCommandExecution

Service: Amazon IoT

Gets information about the specific command execution on a single device.

## Request Syntax

```
GET /command-executions/executionId?includeResult=includeResult&targetArn=targetArn
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### executionId

The unique identifier for the command execution. This information is returned as a response of the `StartCommandExecution` API request.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9_-]+`

Required: Yes

### includeResult

Can be used to specify whether to include the result of the command execution in the `GetCommandExecution` API response. Your device can use this field to provide additional information about the command execution. You only need to specify this field when using the `AWS-IoT` namespace.

### targetArn

The Amazon Resource Number (ARN) of the device on which the command execution is being performed.

Length Constraints: Maximum length of 2048.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "commandArn": "string",
  "completedAt": number,
  "createdAt": number,
  "executionId": "string",
  "executionTimeoutSeconds": number,
  "lastUpdatedAt": number,
  "parameters": {
    "string" : {
      "B": boolean,
      "BIN": blob,
      "D": number,
      "I": number,
      "L": number,
      "S": "string",
      "UL": "string"
    }
  },
  "result": {
    "string" : {
      "B": boolean,
      "BIN": blob,
      "S": "string"
    }
  },
  "startedAt": number,
  "status": "string",
  "statusReason": {
    "reasonCode": "string",
    "reasonDescription": "string"
  },
  "targetArn": "string",
  "timeToLive": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### commandArn

The Amazon Resource Number (ARN) of the command. For example, `arn:aws:iot:<region>:<accountid>:command/<commandId>`

Type: String

### completedAt

The timestamp, when the command execution was completed.

Type: Timestamp

### createdAt

The timestamp, when the command execution was created.

Type: Timestamp

### executionId

The unique identifier of the command execution.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9_-]+`

### executionTimeoutSeconds

Specifies the amount of time in seconds that the device can take to finish a command execution. A timer starts when the command execution is created. If the command execution status is not set to another terminal state before the timer expires, it will automatically update to `TIMED_OUT`.

Type: Long

Valid Range: Minimum value of 1.

## lastUpdatedAt

The timestamp, when the command execution was last updated.

Type: Timestamp

## parameters

The list of parameters that the `StartCommandExecution` API used when performing the command on the device.

Type: String to [CommandParameterValue](#) object map

Map Entries: Maximum number of items.

Key Length Constraints: Minimum length of 1. Maximum length of 192.

Key Pattern: `^[. $a-zA-Z0-9_-]+$`

## result

The result value for the current state of the command execution. The status provides information about the progress of the command execution. The device can use the result field to share additional details about the execution such as a return value of a remote function call.

### Note

If you use the `AWS-IoT-FleetWise` namespace, then this field is not applicable in the API response.

Type: String to [CommandExecutionResult](#) object map

Map Entries: Maximum number of items.

Key Length Constraints: Minimum length of 1. Maximum length of 32.

Key Pattern: `[a-zA-Z0-9_-]+`

## startedAt

The timestamp, when the command execution was started.

Type: Timestamp

## status

The status of the command execution. After your devices receive the command and start performing the operations specified in the command, it can use the `UpdateCommandExecution` MQTT API to update the status information.

Type: String

Valid Values: `CREATED` | `IN_PROGRESS` | `SUCCEEDED` | `FAILED` | `REJECTED` | `TIMED_OUT`

## statusReason

Your devices can use this parameter to provide additional context about the status of a command execution using a reason code and description.

Type: [StatusReason](#) object

## targetArn

The Amazon Resource Number (ARN) of the device on which the command execution is being performed.

Type: String

Length Constraints: Maximum length of 2048.

## timeToLive

The time to live (TTL) parameter that indicates the duration for which executions will be retained in your account. The default value is six months.

Type: Timestamp

## Errors

### InternalServerErrorException

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500



## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetEffectivePolicies

Service: Amazon IoT

Gets a list of the policies that have an effect on the authorization behavior of the specified device when it connects to the Amazon IoT device gateway.

Requires permission to access the [GetEffectivePolicies](#) action.

## Request Syntax

```
POST /effective-policies?thingName=thingName HTTP/1.1
Content-type: application/json

{
  "cognitoIdentityPoolId": "string",
  "principal": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [thingName](#)

The thing name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

## Request Body

The request accepts the following data in JSON format.

### [cognitoIdentityPoolId](#)

The Cognito identity pool ID.

Type: String

Required: No

## [principal](#)

The principal. Valid principals are CertificateArn (arn:aws:iot:region:accountId:cert/certificateId), thingGroupArn (arn:aws:iot:region:accountId:thinggroup/groupName) and Cognitoid (region:id).

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "effectivePolicies": [
    {
      "policyArn": "string",
      "policyDocument": "string",
      "policyName": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [effectivePolicies](#)

The effective policies.

Type: Array of [EffectivePolicy](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetIndexingConfiguration

Service: Amazon IoT

Gets the indexing configuration.

Requires permission to access the [GetIndexingConfiguration](#) action.

## Request Syntax

```
GET /indexing/config HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "thingGroupIndexingConfiguration": {
    "customFields": [
      {
        "name": "string",
        "type": "string"
      }
    ],
    "managedFields": [
      {
        "name": "string",
        "type": "string"
      }
    ],
    "thingGroupIndexingMode": "string"
  },
  "thingIndexingConfiguration": {
    "customFields": [
```

```
{
  {
    "name": "string",
    "type": "string"
  }
],
"deviceDefenderIndexingMode": "string",
"filter": {
  "geoLocations": [
    {
      "name": "string",
      "order": "string"
    }
  ],
  "namedShadowNames": [ "string" ]
},
"managedFields": [
  {
    "name": "string",
    "type": "string"
  }
],
"namedShadowIndexingMode": "string",
"thingConnectivityIndexingMode": "string",
"thingIndexingMode": "string"
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [thingGroupIndexingConfiguration](#)

The index configuration.

Type: [ThingGroupIndexingConfiguration](#) object

### [thingIndexingConfiguration](#)

Thing indexing configuration.

Type: [ThingIndexingConfiguration](#) object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)



- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetJobDocument

Service: Amazon IoT

Gets a job document.

Requires permission to access the [GetJobDocument](#) action.

## Request Syntax

```
GET /jobs/jobId/job-document?beforeSubstitution=beforeSubstitution HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [beforeSubstitution](#)

Provides a view of the job document before and after the substitution parameters have been resolved with their exact values.

### [jobId](#)

The unique identifier you assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "document": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### document

The job document content.

Type: String

Length Constraints: Maximum length of 32768.

## Errors

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetLoggingOptions

Service: Amazon IoT

Gets the logging options.

NOTE: use of this command is not recommended. Use `GetV2LoggingOptions` instead.

Requires permission to access the [GetLoggingOptions](#) action.

## Request Syntax

```
GET /loggingOptions HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "logLevel": "string",
  "roleArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [logLevel](#)

The logging level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

### roleArn

The ARN of the IAM role that grants access.

Type: String

## Errors

### **InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)

- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetOTAUpdate

Service: Amazon IoT

Gets an OTA update.

Requires permission to access the [GetOTAUpdate](#) action.

## Request Syntax

```
GET /otaUpdates/otaUpdateId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [otaUpdateId](#)

The OTA update ID.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "otaUpdateInfo": {
    "additionalParameters": {
      "string" : "string"
    },
    "awsIotJobArn": "string",
    "awsIotJobId": "string",
    "awsJobExecutionsRolloutConfig": {
```



```

    "exponentialRate": {
      "baseRatePerMinute": number,
      "incrementFactor": number,
      "rateIncreaseCriteria": {
        "numberOfNotifiedThings": number,
        "numberOfSucceededThings": number
      }
    },
    "maximumPerMinute": number
  },
  "awsJobPresignedUrlConfig": {
    "expiresInSec": number
  },
  "creationDate": number,
  "description": "string",
  "errorInfo": {
    "code": "string",
    "message": "string"
  },
  "lastModifiedDate": number,
  "otaUpdateArn": "string",
  "otaUpdateFiles": [
    {
      "attributes": {
        "string": "string"
      },
      "codeSigning": {
        "awsSignerJobId": "string",
        "customCodeSigning": {
          "certificateChain": {
            "certificateName": "string",
            "inlineDocument": "string"
          },
          "hashAlgorithm": "string",
          "signature": {
            "inlineDocument": blob
          },
          "signatureAlgorithm": "string"
        },
        "startSigningJobParameter": {
          "destination": {
            "s3Destination": {
              "bucket": "string",
              "prefix": "string"
            }
          }
        }
      }
    }
  ]
}

```

```

    }
    },
    "signingProfileName": "string",
    "signingProfileParameter": {
      "certificateArn": "string",
      "certificatePathOnDevice": "string",
      "platform": "string"
    }
  },
  "fileLocation": {
    "s3Location": {
      "bucket": "string",
      "key": "string",
      "version": "string"
    },
    "stream": {
      "fileId": number,
      "streamId": "string"
    }
  },
  "fileName": "string",
  "fileType": number,
  "fileVersion": "string"
}
],
"otaUpdateId": "string",
"otaUpdateStatus": "string",
"protocols": [ "string" ],
"targets": [ "string" ],
"targetSelection": "string"
}
}

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### otaUpdateInfo

The OTA update info.

Type: [OTAUpdateInfo](#) object

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetPackage

Service: Amazon IoT

Gets information about the specified software package.

Requires permission to access the [GetPackage](#) action.

## Request Syntax

```
GET /packages/packageName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [packageName](#)

The name of the target software package.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "creationDate": number,
  "defaultVersionName": "string",
  "description": "string",
  "lastModifiedDate": number,
  "packageArn": "string",
  "packageName": "string"
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### creationDate

The date the package was created.

Type: Timestamp

### defaultVersionName

The name of the default package version.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_.]+

### description

The package description.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [^\p{C}]+

### lastModifiedDate

The date when the package was last updated.

Type: Timestamp

### packageArn

The ARN for the package.

Type: String

## packageName

The name of the software package.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.]+

## Errors

### InternalServerError

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)

- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# GetPackageConfiguration

Service: Amazon IoT

Gets information about the specified software package's configuration.

Requires permission to access the [GetPackageConfiguration](#) action.

## Request Syntax

```
GET /package-configuration HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "versionUpdateByJobsConfig": {
    "enabled": boolean,
    "roleArn": "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [versionUpdateByJobsConfig](#)

The version that is associated to a specific job.

Type: [VersionUpdateByJobsConfig](#) object

## Errors

### InternalServerErrorException

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetPackageVersion

Service: Amazon IoT

Gets information about the specified package version.

Requires permission to access the [GetPackageVersion](#) action.

## Request Syntax

```
GET /packages/packageName/versions/versionName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [packageName](#)

The name of the associated package.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.]+

Required: Yes

### [versionName](#)

The name of the target package version.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_.]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

Content-type: application/json

```
{
  "artifact": {
    "s3Location": {
      "bucket": "string",
      "key": "string",
      "version": "string"
    }
  },
  "attributes": {
    "string" : "string"
  },
  "creationDate": number,
  "description": "string",
  "errorReason": "string",
  "lastModifiedDate": number,
  "packageName": "string",
  "packageVersionArn": "string",
  "recipe": "string",
  "sbom": {
    "s3Location": {
      "bucket": "string",
      "key": "string",
      "version": "string"
    }
  },
  "sbomValidationStatus": "string",
  "status": "string",
  "versionName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### artifact

The various components that make up a software package version.

Type: [PackageVersionArtifact](#) object

## attributes

Metadata that were added to the package version that can be used to define a package version's configuration.

Type: String to string map

Key Length Constraints: Minimum length of 1.

Key Pattern: `[a-zA-Z0-9:_-]+`

Value Length Constraints: Minimum length of 1.

Value Pattern: `[^\p{C}]+`

## creationDate

The date when the package version was created.

Type: Timestamp

## description

The package version description.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[^\p{C}]+`

## errorReason

Error reason for a package version failure during creation or update.

Type: String

## lastModifiedDate

The date when the package version was last updated.

Type: Timestamp

## packageName

The name of the software package.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.]+

### packageVersionArn

The ARN for the package version.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: ^arn:[!-~]+\$

### recipe

The inline job document associated with a software package version used for a quick job deployment.

Type: String

Length Constraints: Maximum length of 3072.

### sbom

The software bill of materials for a software package version.

Type: [Sbom](#) object

### sbomValidationStatus

The status of the validation for a new software bill of materials added to a software package version.

Type: String

Valid Values: IN\_PROGRESS | FAILED | SUCCEEDED

### status

The status associated to the package version. For more information, see [Package version lifecycle](#).

Type: String

Valid Values: DRAFT | PUBLISHED | DEPRECATED

### versionName

The name of the package version.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_.]+

## Errors

### InternalServerErrorException

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# GetPercentiles

Service: Amazon IoT

Groups the aggregated values that match the query into percentile groupings. The default percentile groupings are: 1,5,25,50,75,95,99, although you can specify your own when you call `GetPercentiles`. This function returns a value for each percentile group specified (or the default percentile groupings). The percentile group "1" contains the aggregated field value that occurs in approximately one percent of the values that match the query. The percentile group "5" contains the aggregated field value that occurs in approximately five percent of the values that match the query, and so on. The result is an approximation, the more values that match the query, the more accurate the percentile values.

Requires permission to access the [GetPercentiles](#) action.

## Request Syntax

```
POST /indices/percentiles HTTP/1.1
Content-type: application/json

{
  "aggregationField": "string",
  "indexName": "string",
  "percents": [ number ],
  "queryString": "string",
  "queryVersion": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [aggregationField](#)

The field to aggregate.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### indexName

The name of the index to search.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### percents

The percentile groups returned.

Type: Array of doubles

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

### queryString

The search query string.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### queryVersion

The query version.

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 200  
Content-type: application/json
```

```
{
  "percentiles": [
    {
      "percent": number,
      "value": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [percentiles](#)

The percentile values of the aggregated fields.

Type: Array of [PercentPair](#) objects

## Errors

### **IndexNotReadyException**

The index is not ready.

HTTP Status Code: 400

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidAggregationException**

The aggregation is invalid.

HTTP Status Code: 400

### **InvalidQueryException**

The query is invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetPolicy

Service: Amazon IoT

Gets information about the specified policy with the policy document of the default version.

Requires permission to access the [GetPolicy](#) action.

## Request Syntax

```
GET /policies/policyName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [policyName](#)

The name of the policy.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200  
Content-type: application/json
```

```
{  
  "creationDate": number,  
  "defaultVersionId": "string",  
  "generationId": "string",  
  "lastModifiedDate": number,  
  "policyArn": "string",  
  "policyDocument": "string",
```

```
"policyName": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### creationDate

The date the policy was created.

Type: Timestamp

### defaultVersionId

The default policy version ID.

Type: String

Pattern: [0-9]+

### generationId

The generation ID of the policy.

Type: String

### lastModifiedDate

The date the policy was last modified.

Type: Timestamp

### policyArn

The policy ARN.

Type: String

### policyDocument

The JSON document that describes the policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 404600.

Pattern: `[\s\S]*`

### policyName

The policy name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400



## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetPolicyVersion

Service: Amazon IoT

Gets information about the specified policy version.

Requires permission to access the [GetPolicyVersion](#) action.

## Request Syntax

```
GET /policies/policyName/version/policyVersionId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### policyName

The name of the policy.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

### policyVersionId

The policy version ID.

Pattern: `[0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200  
Content-type: application/json
```

```
{
  "creationDate": number,
  "generationId": "string",
  "isDefaultVersion": boolean,
  "lastModifiedDate": number,
  "policyArn": "string",
  "policyDocument": "string",
  "policyName": "string",
  "policyVersionId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### creationDate

The date the policy was created.

Type: Timestamp

### generationId

The generation ID of the policy version.

Type: String

### isDefaultVersion

Specifies whether the policy version is the default.

Type: Boolean

### lastModifiedDate

The date the policy was last modified.

Type: Timestamp

### policyArn

The policy ARN.

Type: String

## policyDocument

The JSON document that describes the policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 404600.

Pattern: `[\s\S]*`

## policyName

The policy name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

## policyVersionId

The policy version ID.

Type: String

Pattern: `[0-9]+`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetRegistrationCode

Service: Amazon IoT

Gets a registration code used to register a CA certificate with Amazon IoT.

Amazon IoT will create a registration code as part of this API call if the registration code doesn't exist or has been deleted. If you already have a registration code, this API call will return the same registration code.

Requires permission to access the [GetRegistrationCode](#) action.

## Request Syntax

```
GET /registrationcode HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "registrationCode": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [registrationCode](#)

The CA certificate registration code.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)

- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



## GetStatistics

Service: Amazon IoT

Returns the count, average, sum, minimum, maximum, sum of squares, variance, and standard deviation for the specified aggregated field. If the aggregation field is of type `String`, only the count statistic is returned.

Requires permission to access the [GetStatistics](#) action.

### Request Syntax

```
POST /indices/statistics HTTP/1.1
Content-type: application/json

{
  "aggregationField": "string",
  "indexName": "string",
  "queryString": "string",
  "queryVersion": "string"
}
```

### URI Request Parameters

The request does not use any URI parameters.

### Request Body

The request accepts the following data in JSON format.

#### [aggregationField](#)

The aggregation field name.

Type: String

Length Constraints: Minimum length of 1.

Required: No

#### [indexName](#)

The name of the index to search. The default value is `AWS_Things`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### queryString

The query used to search. You can specify "\*" for the query string to get the count of all indexed things in your Amazon account.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### queryVersion

The version of the query used to search.

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "statistics": {
    "average": number,
    "count": number,
    "maximum": number,
    "minimum": number,
    "stdDeviation": number,
    "sum": number,
    "sumOfSquares": number,
    "variance": number
  }
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### statistics

The statistics returned by the Fleet Indexing service based on the query and aggregation field.

Type: [Statistics](#) object

## Errors

### **IndexNotReadyException**

The index is not ready.

HTTP Status Code: 400

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidAggregationException**

The aggregation is invalid.

HTTP Status Code: 400

### **InvalidQueryException**

The query is invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetThingConnectivityData

Service: Amazon IoT

Retrieves the live connectivity status per device.

## Request Syntax

```
POST /things/thingName/connectivity-data HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### thingName

The name of your IoT thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "connected": boolean,
  "disconnectReason": "string",
  "thingName": "string",
  "timestamp": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### connected

A Boolean that indicates the connectivity status.

Type: Boolean

### disconnectReason

The reason why the client is disconnecting.

Type: String

Valid Values: AUTH\_ERROR | CLIENT\_INITIATED\_DISCONNECT | CLIENT\_ERROR  
| CONNECTION\_LOST | DUPLICATE\_CLIENTID | FORBIDDEN\_ACCESS |  
MQTT\_KEEP\_ALIVE\_TIMEOUT | SERVER\_ERROR | SERVER\_INITIATED\_DISCONNECT  
| THROTTLED | WEBSOCKET\_TTL\_EXPIRATION | CUSTOMAUTH\_TTL\_EXPIRATION |  
UNKNOWN | NONE

### thingName

The name of your IoT thing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### timestamp

The timestamp of when the event occurred.

Type: Timestamp

## Errors

### **IndexNotReadyException**

The index is not ready.

HTTP Status Code: 400

## **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

## **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

## **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# GetTopicRule

Service: Amazon IoT

Gets information about the rule.

Requires permission to access the [GetTopicRule](#) action.

## Request Syntax

```
GET /rules/ruleName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### ruleName

The name of the rule.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^[a-zA-Z0-9_]+$`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "rule": {
    "actions": [
      {
        "cloudwatchAlarm": {
          "alarmName": "string",
          "roleArn": "string",
          "stateReason": "string",
```

```
    "stateValue": "string"
  },
  "cloudwatchLogs": {
    "batchMode": boolean,
    "logGroupName": "string",
    "roleArn": "string"
  },
  "cloudwatchMetric": {
    "metricName": "string",
    "metricNamespace": "string",
    "metricTimestamp": "string",
    "metricUnit": "string",
    "metricValue": "string",
    "roleArn": "string"
  },
  "dynamoDB": {
    "hashKeyField": "string",
    "hashKeyType": "string",
    "hashKeyValue": "string",
    "operation": "string",
    "payloadField": "string",
    "rangeKeyField": "string",
    "rangeKeyType": "string",
    "rangeKeyValue": "string",
    "roleArn": "string",
    "tableName": "string"
  },
  "dynamoDBv2": {
    "putItem": {
      "tableName": "string"
    },
    "roleArn": "string"
  },
  "elasticsearch": {
    "endpoint": "string",
    "id": "string",
    "index": "string",
    "roleArn": "string",
    "type": "string"
  },
  "firehose": {
    "batchMode": boolean,
    "deliveryStreamName": "string",
    "roleArn": "string",
```

```
    "separator": "string"
  },
  "http": {
    "auth": {
      "sigv4": {
        "roleArn": "string",
        "serviceName": "string",
        "signingRegion": "string"
      }
    },
    "confirmationUrl": "string",
    "headers": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    "url": "string"
  },
  "iotAnalytics": {
    "batchMode": boolean,
    "channelArn": "string",
    "channelName": "string",
    "roleArn": "string"
  },
  "iotEvents": {
    "batchMode": boolean,
    "inputName": "string",
    "messageId": "string",
    "roleArn": "string"
  },
  "iotSiteWise": {
    "putAssetPropertyValueEntries": [
      {
        "assetId": "string",
        "entryId": "string",
        "propertyAlias": "string",
        "propertyId": "string",
        "propertyValues": [
          {
            "quality": "string",
            "timestamp": {
              "offsetInNanos": "string",
              "timeInSeconds": "string"
            }
          }
        ]
      }
    ]
  }
}
```

```

        },
        "value": {
            "booleanValue": "string",
            "doubleValue": "string",
            "integerValue": "string",
            "stringValue": "string"
        }
    ]
}
],
"roleArn": "string"
},
"kafka": {
    "clientProperties": {
        "string" : "string"
    },
    "destinationArn": "string",
    "headers": [
        {
            "key": "string",
            "value": "string"
        }
    ],
    "key": "string",
    "partition": "string",
    "topic": "string"
},
"kinesis": {
    "partitionKey": "string",
    "roleArn": "string",
    "streamName": "string"
},
"lambda": {
    "functionArn": "string"
},
"location": {
    "deviceId": "string",
    "latitude": "string",
    "longitude": "string",
    "roleArn": "string",
    "timestamp": {
        "unit": "string",
        "value": "string"
    }
}

```

```
    },
    "trackerName": "string"
  },
  "openSearch": {
    "endpoint": "string",
    "id": "string",
    "index": "string",
    "roleArn": "string",
    "type": "string"
  },
  "republish": {
    "headers": {
      "contentType": "string",
      "correlationData": "string",
      "messageExpiry": "string",
      "payloadFormatIndicator": "string",
      "responseTopic": "string",
      "userProperties": [
        {
          "key": "string",
          "value": "string"
        }
      ]
    },
    "qos": number,
    "roleArn": "string",
    "topic": "string"
  },
  "s3": {
    "bucketName": "string",
    "cannedAcl": "string",
    "key": "string",
    "roleArn": "string"
  },
  "salesforce": {
    "token": "string",
    "url": "string"
  },
  "sns": {
    "messageFormat": "string",
    "roleArn": "string",
    "targetArn": "string"
  },
  "sqs": {
```

```
    "queueUrl": "string",
    "roleArn": "string",
    "useBase64": boolean
  },
  "stepFunctions": {
    "executionNamePrefix": "string",
    "roleArn": "string",
    "stateMachineName": "string"
  },
  "timestream": {
    "databaseName": "string",
    "dimensions": [
      {
        "name": "string",
        "value": "string"
      }
    ],
    "roleArn": "string",
    "tableName": "string",
    "timestamp": {
      "unit": "string",
      "value": "string"
    }
  }
}
],
"awsIotSqlVersion": "string",
"createdAt": number,
"description": "string",
"errorAction": {
  "cloudwatchAlarm": {
    "alarmName": "string",
    "roleArn": "string",
    "stateReason": "string",
    "stateValue": "string"
  },
  "cloudwatchLogs": {
    "batchMode": boolean,
    "logGroupName": "string",
    "roleArn": "string"
  },
  "cloudwatchMetric": {
    "metricName": "string",
    "metricNamespace": "string",
```

```
    "metricTimestamp": "string",
    "metricUnit": "string",
    "metricValue": "string",
    "roleArn": "string"
  },
  "dynamoDB": {
    "hashKeyField": "string",
    "hashKeyType": "string",
    "hashKeyValue": "string",
    "operation": "string",
    "payloadField": "string",
    "rangeKeyField": "string",
    "rangeKeyType": "string",
    "rangeKeyValue": "string",
    "roleArn": "string",
    "tableName": "string"
  },
  "dynamoDBv2": {
    "putItem": {
      "tableName": "string"
    },
    "roleArn": "string"
  },
  "elasticsearch": {
    "endpoint": "string",
    "id": "string",
    "index": "string",
    "roleArn": "string",
    "type": "string"
  },
  "firehose": {
    "batchMode": boolean,
    "deliveryStreamName": "string",
    "roleArn": "string",
    "separator": "string"
  },
  "http": {
    "auth": {
      "sigv4": {
        "roleArn": "string",
        "serviceName": "string",
        "signingRegion": "string"
      }
    }
  },
}
```

```
    "confirmationUrl": "string",
    "headers": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    "url": "string"
  },
  "iotAnalytics": {
    "batchMode": boolean,
    "channelArn": "string",
    "channelName": "string",
    "roleArn": "string"
  },
  "iotEvents": {
    "batchMode": boolean,
    "inputName": "string",
    "messageId": "string",
    "roleArn": "string"
  },
  "iotSiteWise": {
    "putAssetPropertyValueEntries": [
      {
        "assetId": "string",
        "entryId": "string",
        "propertyAlias": "string",
        "propertyId": "string",
        "propertyValues": [
          {
            "quality": "string",
            "timestamp": {
              "offsetInNanos": "string",
              "timeInSeconds": "string"
            },
            "value": {
              "booleanValue": "string",
              "doubleValue": "string",
              "integerValue": "string",
              "stringValue": "string"
            }
          }
        ]
      }
    ]
  }
}
```



```
    ],
    "roleArn": "string"
  },
  "kafka": {
    "clientProperties": {
      "string": "string"
    },
    "destinationArn": "string",
    "headers": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    "key": "string",
    "partition": "string",
    "topic": "string"
  },
  "kinesis": {
    "partitionKey": "string",
    "roleArn": "string",
    "streamName": "string"
  },
  "lambda": {
    "functionArn": "string"
  },
  "location": {
    "deviceId": "string",
    "latitude": "string",
    "longitude": "string",
    "roleArn": "string",
    "timestamp": {
      "unit": "string",
      "value": "string"
    },
    "trackerName": "string"
  },
  "openSearch": {
    "endpoint": "string",
    "id": "string",
    "index": "string",
    "roleArn": "string",
    "type": "string"
  },
}
```

```
"republish": {
  "headers": {
    "contentType": "string",
    "correlationData": "string",
    "messageExpiry": "string",
    "payloadFormatIndicator": "string",
    "responseTopic": "string",
    "userProperties": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  },
  "qos": number,
  "roleArn": "string",
  "topic": "string"
},
"s3": {
  "bucketName": "string",
  "cannedAcl": "string",
  "key": "string",
  "roleArn": "string"
},
"salesforce": {
  "token": "string",
  "url": "string"
},
"sns": {
  "messageFormat": "string",
  "roleArn": "string",
  "targetArn": "string"
},
"sqs": {
  "queueUrl": "string",
  "roleArn": "string",
  "useBase64": boolean
},
"stepFunctions": {
  "executionNamePrefix": "string",
  "roleArn": "string",
  "stateMachineName": "string"
},
"timestream": {
```

```
    "databaseName": "string",
    "dimensions": [
      {
        "name": "string",
        "value": "string"
      }
    ],
    "roleArn": "string",
    "tableName": "string",
    "timestamp": {
      "unit": "string",
      "value": "string"
    }
  },
  "ruleDisabled": boolean,
  "ruleName": "string",
  "sql": "string"
},
"ruleArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### rule

The rule.

Type: [TopicRule](#) object

### ruleArn

The rule ARN.

Type: String

## Errors

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# GetTopicRuleDestination

Service: Amazon IoT

Gets information about a topic rule destination.

Requires permission to access the [GetTopicRuleDestination](#) action.

## Request Syntax

```
GET /destinations/arn+ HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [arn](#)

The ARN of the topic rule destination.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "topicRuleDestination": {
    "arn": "string",
    "createdAt": number,
    "httpUrlProperties": {
      "confirmationUrl": "string"
    },
    "lastUpdatedAt": number,
    "status": "string",
    "statusReason": "string",
    "vpcProperties": {
```

```
    "roleArn": "string",
    "securityGroups": [ "string" ],
    "subnetIds": [ "string" ],
    "vpcId": "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### topicRuleDestination

The topic rule destination.

Type: [TopicRuleDestination](#) object

## Errors

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# GetV2LoggingOptions

Service: Amazon IoT

Gets the fine grained logging options.

Requires permission to access the [GetV2LoggingOptions](#) action.

## Request Syntax

```
GET /v2LoggingOptions HTTP/1.1
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "defaultLogLevel": "string",
  "disableAllLogs": boolean,
  "roleArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [defaultLogLevel](#)

The default log level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

### [disableAllLogs](#)

Disables all logs.

Type: Boolean

### [roleArn](#)

The IAM role ARN Amazon IoT uses to write to your CloudWatch logs.

Type: String

## Errors

### **InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

### **NotConfiguredException**

The resource is not configured.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListActiveViolations

Service: Amazon IoT

Lists the active violations for a given Device Defender security profile.

Requires permission to access the [ListActiveViolations](#) action.

## Request Syntax

```
GET /active-violations?  
behaviorCriteriaType=behaviorCriteriaType&listSuppressedAlerts=listSuppressedAlerts&maxResults=  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [behaviorCriteriaType](#)

The criteria for a behavior.

Valid Values: STATIC | STATISTICAL | MACHINE\_LEARNING

### [listSuppressedAlerts](#)

A list of all suppressed alerts.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token for the next set of results.

### [securityProfileName](#)

The name of the Device Defender security profile for which violations are listed.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

## thingName

The name of the thing whose active violations are listed.

Length Constraints: Minimum length of 1. Maximum length of 128.

## verificationState

The verification state of the violation (detect alarm).

Valid Values: FALSE\_POSITIVE | BENIGN\_POSITIVE | TRUE\_POSITIVE | UNKNOWN

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "activeViolations": [
    {
      "behavior": {
        "criteria": {
          "comparisonOperator": "string",
          "consecutiveDatapointsToAlarm": number,
          "consecutiveDatapointsToClear": number,
          "durationSeconds": number,
          "mlDetectionConfig": {
            "confidenceLevel": "string"
          },
          "statisticalThreshold": {
            "statistic": "string"
          },
        },
        "value": {
          "cidrs": [ "string ],
          "count": number,
          "number": number,
          "numbers": [ number ],
          "ports": [ number ],
          "strings": [ "string ]
        }
      }
    }
  ]
}
```

```

    },
    "exportMetric": boolean,
    "metric": "string",
    "metricDimension": {
      "dimensionName": "string",
      "operator": "string"
    },
    },
    "name": "string",
    "suppressAlerts": boolean
  },
  "lastViolationTime": number,
  "lastViolationValue": {
    "cidrs": [ "string " ],
    "count": number,
    "number": number,
    "numbers": [ number ],
    "ports": [ number ],
    "strings": [ "string " ]
  },
  "securityProfileName": "string",
  "thingName": "string",
  "verificationState": "string",
  "verificationStateDescription": "string",
  "violationEventAdditionalInfo": {
    "confidenceLevel": "string"
  },
  "violationId": "string",
  "violationStartTime": number
}
],
"nextToken": "string"
}

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### activeViolations

The list of active violations.

Type: Array of [ActiveViolation](#) objects

## nextToken

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# ListAttachedPolicies

Service: Amazon IoT

Lists the policies attached to the specified thing group.

Requires permission to access the [ListAttachedPolicies](#) action.

## Request Syntax

```
POST /attached-policies/target?marker=marker&pageSize=pageSize&recursive=recursive
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [marker](#)

The token to retrieve the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: `[A-Za-z0-9+/-]{0,2}`

### [pageSize](#)

The maximum number of results to be returned per request.

Valid Range: Minimum value of 1. Maximum value of 250.

### [recursive](#)

When true, recursively list attached policies.

### [target](#)

The group or principal for which the policies will be listed. Valid principals are CertificateArn (`arn:aws:iot:region:accountId:cert/certificateId`), thingGroupArn (`arn:aws:iot:region:accountId:thinggroup/groupName`) and CognitoId (`region:id`).

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextMarker": "string",
  "policies": [
    {
      "policyArn": "string",
      "policyName": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextMarker

The token to retrieve the next set of results, or ``null`` if there are no more results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/\ ]+={0,2}

### policies

The policies.

Type: Array of [Policy](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListAuditFindings

Service: Amazon IoT

Lists the findings (results) of a Device Defender audit or of the audits performed during a specified time period. (Findings are retained for 90 days.)

Requires permission to access the [ListAuditFindings](#) action.

## Request Syntax

```
POST /audit/findings HTTP/1.1
Content-type: application/json
```

```
{
  "checkName": "string",
  "endTime": number,
  "listSuppressedFindings": boolean,
  "maxResults": number,
  "nextToken": "string",
  "resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateArn": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "issuerCertificateIdentifier": {
      "issuerCertificateSerialNumber": "string",
      "issuerCertificateSubject": "string",
      "issuerId": "string"
    },
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "string"
  },
  "startTime": number,
  "taskId": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### checkName

A filter to limit results to the findings for the specified audit check.

Type: String

Required: No

### endTime

A filter to limit results to those found before the specified time. You must specify either the `startTime` and `endTime` or the `taskId`, but not both.

Type: Timestamp

Required: No

### listSuppressedFindings

Boolean flag indicating whether only the suppressed findings or the unsuppressed findings should be listed. If this parameter isn't provided, the response will list both suppressed and unsuppressed findings.

Type: Boolean

Required: No

### maxResults

The maximum number of results to return at one time. The default is 25.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 250.

Required: No

### nextToken

The token for the next set of results.

Type: String

Required: No

### resourceIdentifier

Information identifying the noncompliant resource.

Type: [ResourceIdentifier](#) object

Required: No

### startTime

A filter to limit results to those found after the specified time. You must specify either the `startTime` and `endTime` or the `taskId`, but not both.

Type: Timestamp

Required: No

### taskId

A filter to limit results to the audit with the specified ID. You must specify either the `taskId` or the `startTime` and `endTime`, but not both.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 40.

Pattern: `[a-zA-Z0-9\-\-]+`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "findings": [
    {
      "checkName": "string",
      "findingId": "string",
      "findingTime": number,
      "isSuppressed": boolean,
```

```
"nonCompliantResource": {
  "additionalInfo": {
    "string" : "string"
  },
  "resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateArn": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "issuerCertificateIdentifier": {
      "issuerCertificateSerialNumber": "string",
      "issuerCertificateSubject": "string",
      "issuerId": "string"
    },
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "string"
  },
  "resourceType": "string"
},
"reasonForNonCompliance": "string",
"reasonForNonComplianceCode": "string",
"relatedResources": [
  {
    "additionalInfo": {
      "string" : "string"
    },
    "resourceIdentifier": {
      "account": "string",
      "caCertificateId": "string",
      "clientId": "string",
      "cognitoIdentityPoolId": "string",
      "deviceCertificateArn": "string",
      "deviceCertificateId": "string",
      "iamRoleArn": "string",
      "issuerCertificateIdentifier": {
        "issuerCertificateSerialNumber": "string",
        "issuerCertificateSubject": "string",
        "issuerId": "string"
      }
    }
  }
]
```



```
        },
        "policyVersionIdentifier": {
            "policyName": "string",
            "policyVersionId": "string"
        },
        "roleAliasArn": "string"
    },
    "resourceType": "string"
}
],
"severity": "string",
"taskId": "string",
"taskStartTime": number
}
],
"nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### findings

The findings (results) of the audit.

Type: Array of [AuditFinding](#) objects

### nextToken

A token that can be used to retrieve the next set of results, or null if there are no additional results.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListAuditMitigationActionsExecutions

Service: Amazon IoT

Gets the status of audit mitigation action tasks that were executed.

Requires permission to access the [ListAuditMitigationActionsExecutions](#) action.

## Request Syntax

```
GET /audit/mitigationactions/executions?  
actionStatus=actionStatus&findingId=findingId&maxResults=maxResults&nextToken=nextToken&taskId=  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [actionStatus](#)

Specify this filter to limit results to those with a specific status.

Valid Values: IN\_PROGRESS | COMPLETED | FAILED | CANCELED | SKIPPED | PENDING

### [findingId](#)

Specify this filter to limit results to those that were applied to a specific audit finding.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_- ]+

Required: Yes

### [maxResults](#)

The maximum number of results to return at one time. The default is 25.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token for the next set of results.

## taskId

Specify this filter to limit results to actions for a specific audit mitigation actions task.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "actionsExecutions": [
    {
      "actionId": "string",
      "actionName": "string",
      "endTime": number,
      "errorCode": "string",
      "findingId": "string",
      "message": "string",
      "startTime": number,
      "status": "string",
      "taskId": "string"
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## actionsExecutions

A set of task execution results based on the input parameters. Details include the mitigation action applied, start time, and task status.

Type: Array of [AuditMitigationActionExecutionMetadata](#) objects

## nextToken

The token for the next set of results.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListAuditMitigationActionsTasks

Service: Amazon IoT

Gets a list of audit mitigation action tasks that match the specified filters.

Requires permission to access the [ListAuditMitigationActionsTasks](#) action.

## Request Syntax

```
GET /audit/mitigationactions/tasks?  
auditTaskId=auditTaskId&endTime=endTime&findingId=findingId&maxResults=maxResults&nextToken=nextToken  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [auditTaskId](#)

Specify this filter to limit results to tasks that were applied to results for a specific audit.

Length Constraints: Minimum length of 1. Maximum length of 40.

Pattern: [a-zA-Z0-9\ - ]+

### [endTime](#)

Specify this filter to limit results to tasks that were completed or canceled on or before a specific date and time.

Required: Yes

### [findingId](#)

Specify this filter to limit results to tasks that were applied to a specific audit finding.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_ - ]+

### [maxResults](#)

The maximum number of results to return at one time. The default is 25.

Valid Range: Minimum value of 1. Maximum value of 250.

### nextToken

The token for the next set of results.

### startTime

Specify this filter to limit results to tasks that began on or after a specific date and time.

Required: Yes

### taskStatus

Specify this filter to limit results to tasks that are in a specific state.

Valid Values: IN\_PROGRESS | COMPLETED | FAILED | CANCELED

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "tasks": [
    {
      "startTime": number,
      "taskId": "string",
      "taskStatus": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.



## nextToken

The token for the next set of results.

Type: String

## tasks

The collection of audit mitigation tasks that matched the filter criteria.

Type: Array of [AuditMitigationActionsTaskMetadata](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListAuditSuppressions

Service: Amazon IoT

Lists your Device Defender audit listings.

Requires permission to access the [ListAuditSuppressions](#) action.

## Request Syntax

```
POST /audit/suppressions/list HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "ascendingOrder": boolean,
  "checkName": "string",
  "maxResults": number,
  "nextToken": "string",
  "resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateArn": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "issuerCertificateIdentifier": {
      "issuerCertificateSerialNumber": "string",
      "issuerCertificateSubject": "string",
      "issuerId": "string"
    },
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "string"
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### ascendingOrder

Determines whether suppressions are listed in ascending order by expiration date or not. If parameter isn't provided, `ascendingOrder=true`.

Type: Boolean

Required: No

### checkName

An audit check name. Checks must be enabled for your account. (Use `DescribeAccountAuditConfiguration` to see the list of all checks, including those that are enabled or use `UpdateAccountAuditConfiguration` to select which checks are enabled.)

Type: String

Required: No

### maxResults

The maximum number of results to return at one time. The default is 25.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 250.

Required: No

### nextToken

The token for the next set of results.

Type: String

Required: No

### resourceIdentifier

Information that identifies the noncompliant resource.

Type: [ResourceIdentifier](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "suppressions": [
    {
      "checkName": "string",
      "description": "string",
      "expirationDate": number,
      "resourceIdentifier": {
        "account": "string",
        "caCertificateId": "string",
        "clientId": "string",
        "cognitoIdentityPoolId": "string",
        "deviceCertificateArn": "string",
        "deviceCertificateId": "string",
        "iamRoleArn": "string",
        "issuerCertificateIdentifier": {
          "issuerCertificateSerialNumber": "string",
          "issuerCertificateSubject": "string",
          "issuerId": "string"
        },
        "policyVersionIdentifier": {
          "policyName": "string",
          "policyVersionId": "string"
        },
        "roleAliasArn": "string"
      },
      "suppressIndefinitely": boolean
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

### suppressions

List of audit suppressions.

Type: Array of [AuditSuppression](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListAuditTasks

Service: Amazon IoT

Lists the Device Defender audits that have been performed during a given time period.

Requires permission to access the [ListAuditTasks](#) action.

## Request Syntax

```
GET /audit/tasks?  
endTime=endTime&maxResults=maxResults&nextToken=nextToken&startTime=startTime&taskStatus=taskSt  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [endTime](#)

The end of the time period.

Required: Yes

### [maxResults](#)

The maximum number of results to return at one time. The default is 25.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token for the next set of results.

### [startTime](#)

The beginning of the time period. Audit information is retained for a limited time (90 days).

Requesting a start time prior to what is retained results in an "InvalidRequestException".

Required: Yes

### [taskStatus](#)

A filter to limit the output to audits with the specified completion status: can be one of "IN\_PROGRESS", "COMPLETED", "FAILED", or "CANCELED".



Valid Values: IN\_PROGRESS | COMPLETED | FAILED | CANCELED

### taskType

A filter to limit the output to the specified type of audit: can be one of "ON\_DEMAND\_AUDIT\_TASK" or "SCHEDULED\_\_AUDIT\_TASK".

Valid Values: ON\_DEMAND\_AUDIT\_TASK | SCHEDULED\_AUDIT\_TASK

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "tasks": [
    {
      "taskId": "string",
      "taskStatus": "string",
      "taskType": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token that can be used to retrieve the next set of results, or null if there are no additional results.

Type: String

## tasks

The audits that were performed during the specified time period.

Type: Array of [AuditTaskMetadata](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# ListAuthorizers

Service: Amazon IoT

Lists the authorizers registered in your account.

Requires permission to access the [ListAuthorizers](#) action.

## Request Syntax

```
GET /authorizers/?  
isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize&status=status HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [ascendingOrder](#)

Return the list of authorizers in ascending alphabetical order.

### [marker](#)

A marker used to get the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: `[A-Za-z0-9+/-]{0,2}`

### [pageSize](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [status](#)

The status of the list authorizers request.

Valid Values: ACTIVE | INACTIVE

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "authorizers": [
    {
      "authorizerArn": "string",
      "authorizerName": "string"
    }
  ],
  "nextMarker": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### authorizers

The authorizers.

Type: Array of [AuthorizerSummary](#) objects

### nextMarker

A marker used to get the next set of results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/\ ]+={0,2}

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# ListBillingGroups

Service: Amazon IoT

Lists the billing groups you have created.

Requires permission to access the [ListBillingGroups](#) action.

## Request Syntax

```
GET /billing-groups?  
maxResults=maxResults&namePrefixFilter=namePrefixFilter&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return per request.

Valid Range: Minimum value of 1. Maximum value of 250.

### [namePrefixFilter](#)

Limit the results to billing groups whose names have the given prefix.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```



```
Content-type: application/json
```

```
{
  "billingGroups": [
    {
      "groupArn": "string",
      "groupName": "string"
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [billingGroups](#)

The list of billing groups.

Type: Array of [GroupNameAndArn](#) objects

### [nextToken](#)

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListCACertificates

Service: Amazon IoT

Lists the CA certificates registered for your Amazon Web Services account.

The results are paginated with a default page size of 25. You can use the returned marker to retrieve additional results.

Requires permission to access the [ListCACertificates](#) action.

## Request Syntax

```
GET /cacertificates?  
isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize&templateName=templateName  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [ascendingOrder](#)

Determines the order of the results.

### [marker](#)

The marker for the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: `[A-Za-z0-9+/-]{0,2}`

### [pageSize](#)

The result page size.

Valid Range: Minimum value of 1. Maximum value of 250.

### [templateName](#)

The name of the provisioning template.

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificates": [
    {
      "certificateArn": "string",
      "certificateId": "string",
      "creationDate": number,
      "status": "string"
    }
  ],
  "nextMarker": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificates

The CA certificates registered in your Amazon Web Services account.

Type: Array of [CACertificate](#) objects

### nextMarker

The current position within the list of CA certificates.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/\ ]+={0,2}

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListCertificateProviders

Service: Amazon IoT

Lists all your certificate providers in your Amazon Web Services account.

Requires permission to access the [ListCertificateProviders](#) action.

## Request Syntax

```
GET /certificate-providers/?isAscendingOrder=ascendingOrder&nextToken=nextToken
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [ascendingOrder](#)

Returns the list of certificate providers in ascending alphabetical order.

### [nextToken](#)

The token for the next set of results, or `null` if there are no more results.

Length Constraints: Maximum length of 1024.

Pattern: `[A-Za-z0-9+/\ ]+={0,2}`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificateProviders": [
    {
      "certificateProviderArn": "string",
      "certificateProviderName": "string"
    }
  ]
}
```

```
    }  
  ],  
  "nextToken": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificateProviders

The list of certificate providers in your Amazon Web Services account.

Type: Array of [CertificateProviderSummary](#) objects

### nextToken

The token for the next set of results, or null if there are no more results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/>]{0,2}

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.



HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListCertificates

Service: Amazon IoT

Lists the certificates registered in your Amazon Web Services account.

The results are paginated with a default page size of 25. You can use the returned marker to retrieve additional results.

Requires permission to access the [ListCertificates](#) action.

## Request Syntax

```
GET /certificates?isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [ascendingOrder](#)

Specifies the order for results. If True, the results are returned in ascending order, based on the creation date.

### [marker](#)

The marker for the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: `[A-Za-z0-9+/-]{0,2}`

### [pageSize](#)

The result page size.

Valid Range: Minimum value of 1. Maximum value of 250.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificates": [
    {
      "certificateArn": "string",
      "certificateId": "string",
      "certificateMode": "string",
      "creationDate": number,
      "status": "string"
    }
  ],
  "nextMarker": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificates

The descriptions of the certificates.

Type: Array of [Certificate](#) objects

### nextMarker

The marker for the next set of results, or null if there are no additional results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/>+={0, 2}

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListCertificatesByCA

Service: Amazon IoT

List the device certificates signed by the specified CA certificate.

Requires permission to access the [ListCertificatesByCA](#) action.

## Request Syntax

```
GET /certificates-by-ca/caCertificateId?  
isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [ascendingOrder](#)

Specifies the order for results. If True, the results are returned in ascending order, based on the creation date.

### [caCertificateId](#)

The ID of the CA certificate. This operation will list all registered device certificate that were signed by this CA certificate.

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: Yes

### [marker](#)

The marker for the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/\ ]+={0,2}

### [pageSize](#)

The result page size.

Valid Range: Minimum value of 1. Maximum value of 250.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificates": [
    {
      "certificateArn": "string",
      "certificateId": "string",
      "certificateMode": "string",
      "creationDate": number,
      "status": "string"
    }
  ],
  "nextMarker": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [certificates](#)

The device certificates signed by the specified CA certificate.

Type: Array of [Certificate](#) objects

### [nextMarker](#)

The marker for the next set of results, or null if there are no additional results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/\ ]+={0,2}

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)



- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListCommandExecutions

Service: Amazon IoT

List all command executions.

## Important

- You must provide only the `startedTimeFilter` or the `completedTimeFilter` information. If you provide both time filters, the API will generate an error. You can use this information to retrieve a list of command executions within a specific timeframe.
- You must provide only the `commandArn` or the `thingArn` information depending on whether you want to list executions for a specific command or an IoT thing. If you provide both fields, the API will generate an error.

For more information about considerations for using this API, see [List command executions in your account \(CLI\)](#).

## Request Syntax

```
POST /command-executions?maxResults=maxResults&nextToken=nextToken HTTP/1.1
Content-type: application/json
```

```
{
  "commandArn": "string",
  "completedTimeFilter": {
    "after": "string",
    "before": "string"
  },
  "namespace": "string",
  "sortOrder": "string",
  "startedTimeFilter": {
    "after": "string",
    "before": "string"
  },
  "status": "string",
  "targetArn": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return in this operation.

Valid Range: Minimum value of 1. Maximum value of 100.

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise `null` to receive the first set of results.

## Request Body

The request accepts the following data in JSON format.

### [commandArn](#)

The Amazon Resource Number (ARN) of the command. You can use this information to list all command executions for a particular command.

Type: String

Required: No

### [completedTimeFilter](#)

List all command executions that completed any time before or after the date and time that you specify. The date and time uses the format `yyyy-MM-dd 'T' HH:mm`.

Type: [TimeFilter](#) object

Required: No

### [namespace](#)

The namespace of the command.

Type: String

Valid Values: AWS-IoT | AWS-IoT-FleetWise

Required: No

### sortOrder

Specify whether to list the command executions that were created in the ascending or descending order. By default, the API returns all commands in the descending order based on the start time or completion time of the executions, that are determined by the `startTimeFilter` and `completeTimeFilter` parameters.

Type: String

Valid Values: ASCENDING | DESCENDING

Required: No

### startedTimeFilter

List all command executions that started any time before or after the date and time that you specify. The date and time uses the format `yyyy-MM-dd 'T' HH:mm`.

Type: [TimeFilter](#) object

Required: No

### status

List all command executions for the device that have a particular status. For example, you can filter the list to display only command executions that have failed or timed out.

Type: String

Valid Values: CREATED | IN\_PROGRESS | SUCCEEDED | FAILED | REJECTED | TIMED\_OUT

Required: No

### targetArn

The Amazon Resource Number (ARN) of the target device. You can use this information to list all command executions for a particular device.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "commandExecutions": [
    {
      "commandArn": "string",
      "completedAt": number,
      "createdAt": number,
      "executionId": "string",
      "startedAt": number,
      "status": "string",
      "targetArn": "string"
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### commandExecutions

The list of command executions.

Type: Array of [CommandExecutionSummary](#) objects

### nextToken

The token to use to get the next set of results, or null if there are no additional results.

Type: String

## Errors

### InternalServerErrorException

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# ListCommands

Service: Amazon IoT

List all commands in your account.

## Request Syntax

```
GET /commands?  
commandParameterName=commandParameterName&maxResults=maxResults&namespace=namespace&nextToken=nextToken  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### commandParameterName

A filter that can be used to display the list of commands that have a specific command parameter name.

Length Constraints: Minimum length of 1. Maximum length of 192.

Pattern: `^[. $a-zA-Z0-9_-]+$`

### maxResults

The maximum number of results to return in this operation. By default, the API returns up to a maximum of 25 results. You can override this default value to return up to a maximum of 100 results for this operation.

Valid Range: Minimum value of 1. Maximum value of 100.

### namespace

The namespace of the command. By default, the API returns all commands that have been created for both `AWS-IoT` and `AWS-IoT-FleetWise` namespaces. You can override this default value if you want to return all commands that have been created only for a specific namespace.

Valid Values: `AWS-IoT` | `AWS-IoT-FleetWise`

### nextToken

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise `null` to receive the first set of results.



## [sortOrder](#)

Specify whether to list the commands that you have created in the ascending or descending order. By default, the API returns all commands in the descending order based on the time that they were created.

Valid Values: ASCENDING | DESCENDING

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "commands": [
    {
      "commandArn": "string",
      "commandId": "string",
      "createdAt": number,
      "deprecated": boolean,
      "displayName": "string",
      "lastUpdatedAt": number,
      "pendingDeletion": boolean
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [commands](#)

The list of commands.

Type: Array of [CommandSummary](#) objects

### [nextToken](#)

The token to use to get the next set of results, or null if there are no additional results.

Type: String

## Errors

### InternalServerErrorException

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)

- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListCustomMetrics

Service: Amazon IoT

Lists your Device Defender detect custom metrics.

Requires permission to access the [ListCustomMetrics](#) action.

## Request Syntax

```
GET /custom-metrics?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time. The default is 25.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token for the next set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "metricNames": [ "string" ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### metricNames

The name of the custom metric.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

### nextToken

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListDetectMitigationActionsExecutions

Service: Amazon IoT

Lists mitigation actions executions for a Device Defender ML Detect Security Profile.

Requires permission to access the [ListDetectMitigationActionsExecutions](#) action.

## Request Syntax

```
GET /detect/mitigationactions/executions?  
endTime=endTime&maxResults=maxResults&nextToken=nextToken&startTime=startTime&taskId=taskId&thi  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### endTime

The end of the time period for which ML Detect mitigation actions executions are returned.

### maxResults

The maximum number of results to return at one time. The default is 25.

Valid Range: Minimum value of 1. Maximum value of 250.

### nextToken

The token for the next set of results.

### startTime

A filter to limit results to those found after the specified time. You must specify either the `startTime` and `endTime` or the `taskId`, but not both.

### taskId

The unique identifier of the task.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9_-]+`

## thingName

The name of the thing whose mitigation actions are listed.

Length Constraints: Minimum length of 1. Maximum length of 128.

## violationId

The unique identifier of the violation.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\-\-]+

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "actionsExecutions": [
    {
      "actionName": "string",
      "errorCode": "string",
      "executionEndDate": number,
      "executionStartDate": number,
      "message": "string",
      "status": "string",
      "taskId": "string",
      "thingName": "string",
      "violationId": "string"
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.



The following data is returned in JSON format by the service.

### actionsExecutions

List of actions executions.

Type: Array of [DetectMitigationActionExecution](#) objects

### nextToken

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListDetectMitigationActionsTasks

Service: Amazon IoT

List of Device Defender ML Detect mitigation actions tasks.

Requires permission to access the [ListDetectMitigationActionsTasks](#) action.

## Request Syntax

```
GET /detect/mitigationactions/tasks?  
endTime=endTime&maxResults=maxResults&nextToken=nextToken&startTime=startTime HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### endTime

The end of the time period for which ML Detect mitigation actions tasks are returned.

Required: Yes

### maxResults

The maximum number of results to return at one time. The default is 25.

Valid Range: Minimum value of 1. Maximum value of 250.

### nextToken

The token for the next set of results.

### startTime

A filter to limit results to those found after the specified time. You must specify either the `startTime` and `endTime` or the `taskId`, but not both.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

HTTP/1.1 200

Content-type: application/json

```
{
  "nextToken": "string",
  "tasks": [
    {
      "actionsDefinition": [
        {
          "actionParams": {
            "addThingsToThingGroupParams": {
              "overrideDynamicGroups": boolean,
              "thingGroupNames": [ "string" ]
            },
            "enableIoTLoggingParams": {
              "logLevel": "string",
              "roleArnForLogging": "string"
            },
            "publishFindingToSnsParams": {
              "topicArn": "string"
            },
            "replaceDefaultPolicyVersionParams": {
              "templateName": "string"
            },
            "updateCACertificateParams": {
              "action": "string"
            },
            "updateDeviceCertificateParams": {
              "action": "string"
            }
          },
          "id": "string",
          "name": "string",
          "roleArn": "string"
        }
      ],
      "onlyActiveViolationsIncluded": boolean,
      "suppressedAlertsIncluded": boolean,
      "target": {
        "behaviorName": "string",
        "securityProfileName": "string",

```

```

        "violationIds": [ "string" ]
    },
    "taskEndTime": number,
    "taskId": "string",
    "taskStartTime": number,
    "taskStatistics": {
        "actionsExecuted": number,
        "actionsFailed": number,
        "actionsSkipped": number
    },
    "taskStatus": "string",
    "violationEventOccurrenceRange": {
        "endTime": number,
        "startTime": number
    }
}
]
}

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

### tasks

The collection of ML Detect mitigation tasks that matched the filter criteria.

Type: Array of [DetectMitigationActionsTaskSummary](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListDimensions

Service: Amazon IoT

List the set of dimensions that are defined for your Amazon Web Services accounts.

Requires permission to access the [ListDimensions](#) action.

## Request Syntax

```
GET /dimensions?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to retrieve at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token for the next set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "dimensionNames": [ "string" ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### dimensionNames

A list of the names of the defined dimensions. Use `DescribeDimension` to get details for a dimension.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

### nextToken

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:



- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListDomainConfigurations

Service: Amazon IoT

Gets a list of domain configurations for the user. This list is sorted alphabetically by domain configuration name.

Requires permission to access the [ListDomainConfigurations](#) action.

## Request Syntax

```
GET /domainConfigurations?marker=marker&pageSize=pageSize&serviceType=serviceType
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [marker](#)

The marker for the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/-]{0,2}

### [pageSize](#)

The result page size.

Valid Range: Minimum value of 1. Maximum value of 250.

### [serviceType](#)

The type of service delivered by the endpoint.

Valid Values: DATA | CREDENTIAL\_PROVIDER | JOBS

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "domainConfigurations": [
    {
      "domainConfigurationArn": "string",
      "domainConfigurationName": "string",
      "serviceType": "string"
    }
  ],
  "nextMarker": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### domainConfigurations

A list of objects that contain summary information about the user's domain configurations.

Type: Array of [DomainConfigurationSummary](#) objects

### nextMarker

The marker for the next set of results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/\ ]+={0,2}

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

## InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListFleetMetrics

Service: Amazon IoT

Lists all your fleet metrics.

Requires permission to access the [ListFleetMetrics](#) action.

## Request Syntax

```
GET /fleet-metrics?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return in this operation.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise `null` to receive the first set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "fleetMetrics": [
    {
      "metricArn": "string",
      "metricName": "string"
    }
  ],
}
```

```
"nextToken": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### fleetMetrics

The list of fleet metrics objects.

Type: Array of [FleetMetricNameAndArn](#) objects

### nextToken

The token for the next set of results. Will not be returned if the operation has returned all results.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListIndices

Service: Amazon IoT

Lists the search indices.

Requires permission to access the [ListIndices](#) action.

## Request Syntax

```
GET /indices?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 500.

### [nextToken](#)

The token used to get the next set of results, or null if there are no additional results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "indexNames": [ "string" ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.



The following data is returned in JSON format by the service.

### indexNames

The index names.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

### nextToken

The token used to get the next set of results, or null if there are no additional results.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

## HTTP Status Code: 401

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListJobExecutionsForJob

Service: Amazon IoT

Lists the job executions for a job.

Requires permission to access the [ListJobExecutionsForJob](#) action.

## Request Syntax

```
GET /jobs/jobId/things?maxResults=maxResults&nextToken=nextToken&status=status HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [jobId](#)

The unique identifier you assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_- ]+

Required: Yes

### [maxResults](#)

The maximum number of results to be returned per request.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token to retrieve the next set of results.

### [status](#)

The status of the job.

Valid Values: QUEUED | IN\_PROGRESS | SUCCEEDED | FAILED | TIMED\_OUT | REJECTED | REMOVED | CANCELED

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "executionSummaries": [
    {
      "jobExecutionSummary": {
        "executionNumber": number,
        "lastUpdatedAt": number,
        "queuedAt": number,
        "retryAttempt": number,
        "startedAt": number,
        "status": "string"
      },
      "thingArn": "string"
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### executionSummaries

A list of job execution summaries.

Type: Array of [JobExecutionSummaryForJob](#) objects

### nextToken

The token for the next set of results, or **null** if there are no additional results.

Type: String

## Errors

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# ListJobExecutionsForThing

Service: Amazon IoT

Lists the job executions for the specified thing.

Requires permission to access the [ListJobExecutionsForThing](#) action.

## Request Syntax

```
GET /things/thingName/jobs?  
jobId=jobId&maxResults=maxResults&namespaceId=namespaceId&nextToken=nextToken&status=status  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### jobId

The unique identifier you assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

### maxResults

The maximum number of results to be returned per request.

Valid Range: Minimum value of 1. Maximum value of 250.

### namespaceId

The namespace used to indicate that a job is a customer-managed job.

When you specify a value for this parameter, Amazon IoT Core sends jobs notifications to MQTT topics that contain the value in the following format.

```
$aws/things/THING_NAME/jobs/JOB_ID/notify-namespace-NAMESPACE_ID/
```

#### Note

The namespaceId feature is only supported by Amazon IoT Greengrass at this time. For more information, see [Setting up Amazon IoT Greengrass core devices](#).

Pattern: [a-zA-Z0-9\_-]+

### nextToken

The token to retrieve the next set of results.

### status

An optional filter that lets you search for jobs that have the specified status.

Valid Values: QUEUED | IN\_PROGRESS | SUCCEEDED | FAILED | TIMED\_OUT | REJECTED | REMOVED | CANCELED

### thingName

The thing name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "executionSummaries": [
    {
      "jobExecutionSummary": {
        "executionNumber": number,
        "lastUpdatedAt": number,
        "queuedAt": number,
        "retryAttempt": number,
        "startedAt": number,
        "status": "string"
      },
      "jobId": "string"
    }
  ]
}
```



```
    }  
  ],  
  "nextToken": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### executionSummaries

A list of job execution summaries.

Type: Array of [JobExecutionSummaryForThing](#) objects

### nextToken

The token for the next set of results, or **null** if there are no additional results.

Type: String

## Errors

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListJobs

Service: Amazon IoT

Lists jobs.

Requires permission to access the [ListJobs](#) action.

## Request Syntax

```
GET /jobs?  
maxResults=maxResults&namespaceId=namespaceId&nextToken=nextToken&status=status&targetSelection=targetSelection  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### maxResults

The maximum number of results to return per request.

Valid Range: Minimum value of 1. Maximum value of 250.

### namespaceId

The namespace used to indicate that a job is a customer-managed job.

When you specify a value for this parameter, Amazon IoT Core sends jobs notifications to MQTT topics that contain the value in the following format.

```
$aws/things/THING_NAME/jobs/JOB_ID/notify-namespace-NAMESPACE_ID/
```

#### Note

The namespaceId feature is only supported by Amazon IoT Greengrass at this time. For more information, see [Setting up Amazon IoT Greengrass core devices](#).

Pattern: [a-zA-Z0-9\_-]+

### nextToken

The token to retrieve the next set of results.

## status

An optional filter that lets you search for jobs that have the specified status.

Valid Values: IN\_PROGRESS | CANCELED | COMPLETED | DELETION\_IN\_PROGRESS | SCHEDULED

## targetSelection

Specifies whether the job will continue to run (CONTINUOUS), or will be complete after all those things specified as targets have completed the job (SNAPSHOT). If continuous, the job may also be run on a thing when a change is detected in a target. For example, a job will run on a thing when the thing is added to a target group, even after the job was completed by all things originally in the group.

### **Note**

We recommend that you use continuous jobs instead of snapshot jobs for dynamic thing group targets. By using continuous jobs, devices that join the group receive the job execution even after the job has been created.

Valid Values: CONTINUOUS | SNAPSHOT

## thingGroupId

A filter that limits the returned jobs to those for the specified group.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\ - ]+

## thingGroupName

A filter that limits the returned jobs to those for the specified group.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_ - ]+

## **Request Body**

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "jobs": [
    {
      "completedAt": number,
      "createdAt": number,
      "isConcurrent": boolean,
      "jobArn": "string",
      "jobId": "string",
      "lastUpdatedAt": number,
      "status": "string",
      "targetSelection": "string",
      "thingGroupId": "string"
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### jobs

A list of jobs.

Type: Array of [JobSummary](#) objects

### nextToken

The token for the next set of results, or **null** if there are no additional results.

Type: String

## Errors

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# ListJobTemplates

Service: Amazon IoT

Returns a list of job templates.

Requires permission to access the [ListJobTemplates](#) action.

## Request Syntax

```
GET /job-templates?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return in the list.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token to use to return the next set of results in the list.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "jobTemplates": [
    {
      "createdAt": number,
      "description": "string",
      "jobTemplateArn": "string",
```



```
    "jobTemplateId": "string"  
  }  
],  
"nextToken": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### jobTemplates

A list of objects that contain information about the job templates.

Type: Array of [JobTemplateSummary](#) objects

### nextToken

The token for the next set of results, or **null** if there are no additional results.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListManagedJobTemplates

Service: Amazon IoT

Returns a list of managed job templates.

## Request Syntax

```
GET /managed-job-templates?  
maxResults=maxResults&nextToken=nextToken&templateName=templateName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### maxResults

Maximum number of entries that can be returned.

Valid Range: Minimum value of 1. Maximum value of 250.

### nextToken

The token to retrieve the next set of results.

### templateName

An optional parameter for template name. If specified, only the versions of the managed job templates that have the specified template name will be returned.

Length Constraints: Minimum length of 1. Maximum length of 64.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200  
Content-type: application/json  
  
{  
  "managedJobTemplates": [  
    ...  
  ]  
}
```

```
{
  "description": "string",
  "environments": [ "string" ],
  "templateArn": "string",
  "templateName": "string",
  "templateVersion": "string"
},
"nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### managedJobTemplates

A list of managed job templates that are returned.

Type: Array of [ManagedJobTemplateSummary](#) objects

### nextToken

The token to retrieve the next set of results.

Type: String

## Errors

### **InternalServerErrorException**

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListMetricValues

Service: Amazon IoT

Lists the values reported for an Amazon IoT Device Defender metric (device-side metric, cloud-side metric, or custom metric) by the given thing during the specified time period.

## Request Syntax

```
GET /metric-values?  
dimensionName=dimensionName&dimensionValueOperator=dimensionValueOperator&endTime=endTime&maxRe  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### dimensionName

The dimension name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### dimensionValueOperator

The dimension value operator.

Valid Values: IN | NOT\_IN

### endTime

The end of the time period for which metric values are returned.

Required: Yes

### maxResults

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### metricName

The name of the security profile metric for which values are returned.

Required: Yes

### nextToken

The token for the next set of results.

### startTime

The start of the time period for which metric values are returned.

Required: Yes

### thingName

The name of the thing for which security profile metric values are returned.

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "metricDatumList": [
    {
      "timestamp": number,
      "value": {
        "cidrs": [ "string" ],
        "count": number,
        "number": number,
        "numbers": [ number ],
        "ports": [ number ],
        "strings": [ "string" ]
      }
    }
  ],
  "nextToken": "string"
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### metricDatumList

The data the thing reports for the metric during the specified time period.

Type: Array of [MetricDatum](#) objects

### nextToken

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.



## HTTP Status Code: 400

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListMitigationActions

Service: Amazon IoT

Gets a list of all mitigation actions that match the specified filter criteria.

Requires permission to access the [ListMitigationActions](#) action.

## Request Syntax

```
GET /mitigationactions/actions?  
actionType=actionType&maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [actionType](#)

Specify a value to limit the result to mitigation actions with a specific action type.

Valid Values: UPDATE\_DEVICE\_CERTIFICATE | UPDATE\_CA\_CERTIFICATE |  
ADD\_THINGS\_TO\_THING\_GROUP | REPLACE\_DEFAULT\_POLICY\_VERSION |  
ENABLE\_IOT\_LOGGING | PUBLISH\_FINDING\_TO\_SNS

### [maxResults](#)

The maximum number of results to return at one time. The default is 25.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token for the next set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "actionIdentifiers": [
    {
      "actionArn": "string",
      "actionName": "string",
      "creationDate": number
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [actionIdentifiers](#)

A set of actions that matched the specified filter criteria.

Type: Array of [MitigationActionIdentifier](#) objects

### [nextToken](#)

The token for the next set of results.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListOTAUpdates

Service: Amazon IoT

Lists OTA updates.

Requires permission to access the [ListOTAUpdates](#) action.

## Request Syntax

```
GET /otaUpdates?  
maxResults=maxResults&nextToken=nextToken&otaUpdateStatus=otaUpdateStatus HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

A token used to retrieve the next set of results.

### [otaUpdateStatus](#)

The OTA update job status.

Valid Values: CREATE\_PENDING | CREATE\_IN\_PROGRESS | CREATE\_COMPLETE |  
CREATE\_FAILED | DELETE\_IN\_PROGRESS | DELETE\_FAILED

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200  
Content-type: application/json
```

```
{
  "nextToken": "string",
  "otaUpdates": [
    {
      "creationDate": number,
      "otaUpdateArn": "string",
      "otaUpdateId": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token to use to get the next set of results.

Type: String

### otaUpdates

A list of OTA update jobs.

Type: Array of [OTAUpdateSummary](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListOutgoingCertificates

Service: Amazon IoT

Lists certificates that are being transferred but not yet accepted.

Requires permission to access the [ListOutgoingCertificates](#) action.

## Request Syntax

```
GET /certificates-out-going?  
isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [ascendingOrder](#)

Specifies the order for results. If True, the results are returned in ascending order, based on the creation date.

### [marker](#)

The marker for the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: `[A-Za-z0-9+/-]{0,2}`

### [pageSize](#)

The result page size.

Valid Range: Minimum value of 1. Maximum value of 250.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```



```
Content-type: application/json

{
  "nextMarker": "string",
  "outgoingCertificates": [
    {
      "certificateArn": "string",
      "certificateId": "string",
      "creationDate": number,
      "transferDate": number,
      "transferMessage": "string",
      "transferredTo": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextMarker

The marker for the next set of results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/>+={0,2}

### outgoingCertificates

The certificates that are being transferred but not yet accepted.

Type: Array of [OutgoingCertificate](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# ListPackages

Service: Amazon IoT

Lists the software packages associated to the account.

Requires permission to access the [ListPackages](#) action.

## Request Syntax

```
GET /packages?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results returned at one time.

Valid Range: Minimum value of 1. Maximum value of 100.

### [nextToken](#)

The token for the next set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "packageSummaries": [
    {
      "creationDate": number,
      "defaultVersionName": "string",
      "lastModifiedDate": number,

```

```
    "packageName": "string"  
  }  
]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token for the next set of results.

Type: String

### packageSummaries

The software package summary.

Type: Array of [PackageSummary](#) objects

## Errors

### InternalServerErrorException

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListPackageVersions

Service: Amazon IoT

Lists the software package versions associated to the account.

Requires permission to access the [ListPackageVersions](#) action.

## Request Syntax

```
GET /packages/packageName/versions?  
maxResults=maxResults&nextToken=nextToken&status=status HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 100.

### [nextToken](#)

The token for the next set of results.

### [packageName](#)

The name of the target software package.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.]+

Required: Yes

### [status](#)

The status of the package version. For more information, see [Package version lifecycle](#).

Valid Values: DRAFT | PUBLISHED | DEPRECATED

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "packageVersionSummaries": [
    {
      "creationDate": number,
      "lastModifiedDate": number,
      "packageName": "string",
      "status": "string",
      "versionName": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token for the next set of results.

Type: String

### packageVersionSummaries

Lists the package versions associated to the package.

Type: Array of [PackageVersionSummary](#) objects

## Errors

### InternalServerErrorException

Internal error from the service that indicates an unexpected error or that the service is unavailable.



HTTP Status Code: 500

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **ValidationException**

The request is not valid.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListPolicies

Service: Amazon IoT

Lists your policies.

Requires permission to access the [ListPolicies](#) action.

## Request Syntax

```
GET /policies?isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [ascendingOrder](#)

Specifies the order for results. If true, the results are returned in ascending creation order.

### [marker](#)

The marker for the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: `[A-Za-z0-9+/-]{0,2}`

### [pageSize](#)

The result page size.

Valid Range: Minimum value of 1. Maximum value of 250.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200  
Content-type: application/json
```

```
{
  "nextMarker": "string",
  "policies": [
    {
      "policyArn": "string",
      "policyName": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextMarker

The marker for the next set of results, or null if there are no additional results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/\ ]+={0,2}

### policies

The descriptions of the policies.

Type: Array of [Policy](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListPolicyPrincipals

Service: Amazon IoT

Lists the principals associated with the specified policy.

**Note:** This action is deprecated and works as expected for backward compatibility, but we won't add enhancements. Use [ListTargetsForPolicy](#) instead.

Requires permission to access the [ListPolicyPrincipals](#) action.

## Request Syntax

```
GET /policy-principals?isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize
HTTP/1.1
x-amzn-iot-policy: policyName
```

## URI Request Parameters

The request uses the following URI parameters.

### [ascendingOrder](#)

Specifies the order for results. If true, the results are returned in ascending creation order.

### [marker](#)

The marker for the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+ / ]+={0,2}

### [pageSize](#)

The result page size.

Valid Range: Minimum value of 1. Maximum value of 250.

### [policyName](#)

The policy name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [\w+=, .@- ]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextMarker": "string",
  "principals": [ "string" ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextMarker](#)

The marker for the next set of results, or null if there are no additional results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `[A-Za-z0-9+/>]{0,2}`

### [principals](#)

The descriptions of the principals.

Type: Array of strings

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# ListPolicyVersions

Service: Amazon IoT

Lists the versions of the specified policy and identifies the default version.

Requires permission to access the [ListPolicyVersions](#) action.

## Request Syntax

```
GET /policies/policyName/version HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [policyName](#)

The policy name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "policyVersions": [
    {
      "createDate": number,
      "isDefaultVersion": boolean,
      "versionId": "string"
    }
  ]
}
```

```
]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [policyVersions](#)

The policy versions.

Type: Array of [PolicyVersion](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListPrincipalPolicies

Service: Amazon IoT

Lists the policies attached to the specified principal. If you use an Cognito identity, the ID must be in [AmazonCognito Identity format](#).

**Note:** This action is deprecated and works as expected for backward compatibility, but we won't add enhancements. Use [ListAttachedPolicies](#) instead.

Requires permission to access the [ListPrincipalPolicies](#) action.

## Request Syntax

```
GET /principal-policies?isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize
HTTP/1.1
x-amzn-iot-principal: principal
```

## URI Request Parameters

The request uses the following URI parameters.

### [ascendingOrder](#)

Specifies the order for results. If true, results are returned in ascending creation order.

### [marker](#)

The marker for the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/-]{0,2}

### [pageSize](#)

The result page size.

Valid Range: Minimum value of 1. Maximum value of 250.

### [principal](#)

The principal. Valid principals are CertificateArn (arn:aws:iot:region:accountId:cert/certificateId), thingGroupArn (arn:aws:iot:region:accountId:thinggroup/groupName) and CognitoId (region:id).

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextMarker": "string",
  "policies": [
    {
      "policyArn": "string",
      "policyName": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextMarker](#)

The marker for the next set of results, or null if there are no additional results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/-]{0,2}

### [policies](#)

The policies.

Type: Array of [Policy](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)

- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

## ListPrincipalThings

Service: Amazon IoT

Lists the things associated with the specified principal. A principal can be X.509 certificates, IAM users, groups, and roles, Amazon Cognito identities or federated identities.

Requires permission to access the [ListPrincipalThings](#) action.

### Request Syntax

```
GET /principals/things?maxResults=maxResults&nextToken=nextToken HTTP/1.1
x-amzn-principal: principal
```

### URI Request Parameters

The request uses the following URI parameters.

#### [maxResults](#)

The maximum number of results to return in this operation.

Valid Range: Minimum value of 1. Maximum value of 250.

#### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

#### [principal](#)

The principal.

Required: Yes

### Request Body

The request does not have a request body.

### Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```



```
{  
  "nextToken": "string",  
  "things": [ "string" ]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

### things

The things.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

## ListPrincipalThingsV2

Service: Amazon IoT

Lists the things associated with the specified principal. A principal can be an X.509 certificate or an Amazon Cognito ID.

Requires permission to access the [ListPrincipalThings](#) action.

### Request Syntax

```
GET /principals/things-v2?  
maxResults=maxResults&nextToken=nextToken&thingPrincipalType=thingPrincipalType  
HTTP/1.1  
x-amzn-principal: principal
```

### URI Request Parameters

The request uses the following URI parameters.

#### [maxResults](#)

The maximum number of results to return in this operation.

Valid Range: Minimum value of 1. Maximum value of 250.

#### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise `null` to receive the first set of results.

#### [principal](#)

The principal. A principal can be an X.509 certificate or an Amazon Cognito ID.

Required: Yes

#### [thingPrincipalType](#)

The type of the relation you want to filter in the response. If no value is provided in this field, the response will list all things, including both the `EXCLUSIVE_THING` and `NON_EXCLUSIVE_THING` attachment types.

- `EXCLUSIVE_THING` - Attaches the specified principal to the specified thing, exclusively. The thing will be the only thing that's attached to the principal.

- `NON_EXCLUSIVE_THING` - Attaches the specified principal to the specified thing. Multiple things can be attached to the principal.

Valid Values: `EXCLUSIVE_THING` | `NON_EXCLUSIVE_THING`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "principalThingObjects": [
    {
      "thingName": "string",
      "thingPrincipalType": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

### principalThingObjects

A list of `thingPrincipalObject` that represents the principal and the type of relation it has with the thing.

Type: Array of [PrincipalThingObject](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)

- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListProvisioningTemplates

Service: Amazon IoT

Lists the provisioning templates in your Amazon Web Services account.

Requires permission to access the [ListProvisioningTemplates](#) action.

## Request Syntax

```
GET /provisioning-templates?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

A token to retrieve the next set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "templates": [
    {
      "creationDate": number,
      "description": "string",
      "enabled": boolean,
      "lastModifiedDate": number,
    }
  ]
}
```

```
    "templateArn": "string",
    "templateName": "string",
    "type": "string"
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

A token to retrieve the next set of results.

Type: String

### [templates](#)

A list of provisioning templates

Type: Array of [ProvisioningTemplateSummary](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400



## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListProvisioningTemplateVersions

Service: Amazon IoT

A list of provisioning template versions.

Requires permission to access the [ListProvisioningTemplateVersions](#) action.

## Request Syntax

```
GET /provisioning-templates/templateName/versions?  
maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

A token to retrieve the next set of results.

### [templateName](#)

The name of the provisioning template.

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "nextToken": "string",
  "versions": [
    {
      "creationDate": number,
      "isDefaultVersion": boolean,
      "versionId": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token to retrieve the next set of results.

Type: String

### versions

The list of provisioning template versions.

Type: Array of [ProvisioningTemplateVersionSummary](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListRelatedResourcesForAuditFinding

Service: Amazon IoT

The related resources of an Audit finding. The following resources can be returned from calling this API:

- DEVICE\_CERTIFICATE
- CA\_CERTIFICATE
- IOT\_POLICY
- COGNITO\_IDENTITY\_POOL
- CLIENT\_ID
- ACCOUNT\_SETTINGS
- ROLE\_ALIAS
- IAM\_ROLE
- ISSUER\_CERTIFICATE

## Note

This API is similar to DescribeAuditFinding's [RelatedResources](#) but provides pagination and is not limited to 10 resources. When calling [DescribeAuditFinding](#) for the intermediate CA revoked for active device certificates check, RelatedResources will not be populated. You must use this API, ListRelatedResourcesForAuditFinding, to list the certificates.

## Request Syntax

```
GET /audit/relatedResources?  
findingId=findingId&maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### findingId

The finding Id.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

### maxResults

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### nextToken

A token that can be used to retrieve the next set of results, or null if there are no additional results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "relatedResources": [
    {
      "additionalInfo": {
        "string": "string"
      },
      "resourceIdentifier": {
        "account": "string",
        "caCertificateId": "string",
        "clientId": "string",
        "cognitoIdentityPoolId": "string",
        "deviceCertificateArn": "string",
        "deviceCertificateId": "string",
        "iamRoleArn": "string",
        "issuerCertificateIdentifier": {
          "issuerCertificateSerialNumber": "string",
          "issuerCertificateSubject": "string",

```

```
        "issuerId": "string"
    },
    "policyVersionIdentifier": {
        "policyName": "string",
        "policyVersionId": "string"
    },
    "roleAliasArn": "string"
},
"resourceType": "string"
}
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

A token that can be used to retrieve the next set of results, or `null` for the first API call.

Type: String

### [relatedResources](#)

The related resources.

Type: Array of [RelatedResource](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# ListRoleAliases

Service: Amazon IoT

Lists the role aliases registered in your account.

Requires permission to access the [ListRoleAliases](#) action.

## Request Syntax

```
GET /role-aliases?isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [ascendingOrder](#)

Return the list of role aliases in ascending alphabetical order.

### [marker](#)

A marker used to get the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: `[A-Za-z0-9+/-]{0,2}`

### [pageSize](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "nextMarker": "string",
  "roleAliases": [ "string" ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextMarker

A marker used to get the next set of results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/>+={0,2}

### roleAliases

The role aliases.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [\w=,@-]+

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListSbomValidationResults

Service: Amazon IoT

The validation results for all software bill of materials (SBOM) attached to a specific software package version.

Requires permission to access the [ListSbomValidationResults](#) action.

## Request Syntax

```
GET /packages/packageName/versions/versionName/sbom-validation-results?  
maxResults=maxResults&nextToken=nextToken&validationResult=validationResult HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 100.

### [nextToken](#)

A token that can be used to retrieve the next set of results, or null if there are no additional results.

### [packageName](#)

The name of the new software package.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.]+

Required: Yes

### [validationResult](#)

The end result of the

Valid Values: FAILED | SUCCEEDED

## versionName

The name of the new package version.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_.]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "validationResultSummaries": [
    {
      "errorCode": "string",
      "errorMessage": "string",
      "fileName": "string",
      "validationResult": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token that can be used to retrieve the next set of results, or null if there are no additional results.

Type: String

### [validationResultSummaries](#)

A summary of the validation results for each software bill of materials attached to a software package version.

Type: Array of [SbomValidationResultSummary](#) objects

## Errors

### InternalServerError

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)

- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListScheduledAudits

Service: Amazon IoT

Lists all of your scheduled audits.

Requires permission to access the [ListScheduledAudits](#) action.

## Request Syntax

```
GET /audit/scheduledaudits?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time. The default is 25.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token for the next set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "scheduledAudits": [
    {
      "dayOfMonth": "string",
      "dayOfWeek": "string",
      "frequency": "string",
```



```
    "scheduledAuditArn": "string",  
    "scheduledAuditName": "string"  
  }  
]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

### [scheduledAudits](#)

The list of scheduled audits.

Type: Array of [ScheduledAuditMetadata](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListSecurityProfiles

Service: Amazon IoT

Lists the Device Defender security profiles you've created. You can filter security profiles by dimension or custom metric.

Requires permission to access the [ListSecurityProfiles](#) action.

## Note

`dimensionName` and `metricName` cannot be used in the same request.

## Request Syntax

```
GET /security-profiles?
dimensionName=dimensionName&maxResults=maxResults&metricName=metricName&nextToken=nextToken
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### dimensionName

A filter to limit results to the security profiles that use the defined dimension. Cannot be used with `metricName`

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

### maxResults

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### metricName

The name of the custom metric. Cannot be used with `dimensionName`.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### [nextToken](#)

The token for the next set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "securityProfileIdentifiers": [
    {
      "arn": "string",
      "name": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

### [securityProfileIdentifiers](#)

A list of security profile identifiers (names and ARNs).

Type: Array of [SecurityProfileIdentifier](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# ListSecurityProfilesForTarget

Service: Amazon IoT

Lists the Device Defender security profiles attached to a target (thing group).

Requires permission to access the [ListSecurityProfilesForTarget](#) action.

## Request Syntax

```
GET /security-profiles-for-target?  
maxResults=maxResults&nextToken=nextToken&recursive=recursive&securityProfileTargetArn=securityProfileTargetArn  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token for the next set of results.

### [recursive](#)

If true, return child groups too.

### [securityProfileTargetArn](#)

The ARN of the target (thing group) whose attached security profiles you want to get.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "nextToken": "string",
  "securityProfileTargetMappings": [
    {
      "securityProfileIdentifier": {
        "arn": "string",
        "name": "string"
      },
      "target": {
        "arn": "string"
      }
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

### [securityProfileTargetMappings](#)

A list of security profiles and their associated targets.

Type: Array of [SecurityProfileTargetMapping](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500



## InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListStreams

Service: Amazon IoT

Lists all of the streams in your Amazon Web Services account.

Requires permission to access the [ListStreams](#) action.

## Request Syntax

```
GET /streams?isAscendingOrder=ascendingOrder&maxResults=maxResults&nextToken=nextToken
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [ascendingOrder](#)

Set to true to return the list of streams in ascending order.

### [maxResults](#)

The maximum number of results to return at a time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

A token used to get the next set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "streams": [
```

```
{
  "description": "string",
  "streamArn": "string",
  "streamId": "string",
  "streamVersion": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token used to get the next set of results.

Type: String

### streams

A list of streams.

Type: Array of [StreamSummary](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListTagsForResource

Service: Amazon IoT

Lists the tags (metadata) you have assigned to the resource.

Requires permission to access the [ListTagsForResource](#) action.

## Request Syntax

```
GET /tags?nextToken=nextToken&resourceArn=resourceArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise `null` to receive the first set of results.

### [resourceArn](#)

The ARN of the resource.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "nextToken": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

```
    }  
  ]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

### [tags](#)

The list of tags assigned to the resource.

Type: Array of [Tag](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListTargetsForPolicy

Service: Amazon IoT

List targets for the specified policy.

Requires permission to access the [ListTargetsForPolicy](#) action.

## Request Syntax

```
POST /policy-targets/policyName?marker=marker&pageSize=pageSize HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### marker

A marker used to get the next set of results.

Length Constraints: Maximum length of 1024.

Pattern: `[A-Za-z0-9+/-]{0,2}`

### pageSize

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### policyName

The policy name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@-]{1,128}`

Required: Yes

## Request Body

The request does not have a request body.



## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextMarker": "string",
  "targets": [ "string" ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextMarker

A marker used to get the next set of results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [A-Za-z0-9+/\ ]+={0,2}

### targets

The policy targets.

Type: Array of strings

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListTargetsForSecurityProfile

Service: Amazon IoT

Lists the targets (thing groups) associated with a given Device Defender security profile.

Requires permission to access the [ListTargetsForSecurityProfile](#) action.

## Request Syntax

```
GET /security-profiles/securityProfileName/targets?  
maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token for the next set of results.

### [securityProfileName](#)

The security profile.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "nextToken": "string",
  "securityProfileTargets": [
    {
      "arn": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

### securityProfileTargets

The thing groups to which the security profile is attached.

Type: Array of [SecurityProfileTarget](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListThingGroups

Service: Amazon IoT

List the thing groups in your account.

Requires permission to access the [ListThingGroups](#) action.

## Request Syntax

```
GET /thing-groups?  
maxResults=maxResults&namePrefixFilter=namePrefixFilter&nextToken=nextToken&parentGroup=parentG  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [namePrefixFilter](#)

A filter that limits the results to those with the specified name prefix.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9: _- ]+`

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

### [parentGroup](#)

A filter that limits the results to those with the specified parent group.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9: _- ]+`

## recursive

If true, return child groups as well.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "thingGroups": [
    {
      "groupArn": "string",
      "groupName": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token to use to get the next set of results. Will not be returned if operation has returned all results.

Type: String

### thingGroups

The thing groups.

Type: Array of [GroupNameAndArn](#) objects



## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# ListThingGroupsForThing

Service: Amazon IoT

List the thing groups to which the specified thing belongs.

Requires permission to access the [ListThingGroupsForThing](#) action.

## Request Syntax

```
GET /things/thingName/thing-groups?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### maxResults

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### nextToken

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

### thingName

The thing name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "nextToken": "string",
  "thingGroups": [
    {
      "groupArn": "string",
      "groupName": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

### thingGroups

The thing groups.

Type: Array of [GroupNameAndArn](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListThingPrincipals

Service: Amazon IoT

Lists the principals associated with the specified thing. A principal can be X.509 certificates, IAM users, groups, and roles, Amazon Cognito identities or federated identities.

Requires permission to access the [ListThingPrincipals](#) action.

## Request Syntax

```
GET /things/thingName/principals?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return in this operation.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

### [thingName](#)

The name of the thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "principals": [ "string" ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

### principals

The principals associated with the thing.

Type: Array of strings

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# ListThingPrincipalsV2

Service: Amazon IoT

Lists the principals associated with the specified thing. A principal can be an X.509 certificate or an Amazon Cognito ID.

Requires permission to access the [ListThingPrincipals](#) action.

## Request Syntax

```
GET /things/thingName/principals-v2?  
maxResults=maxResults&nextToken=nextToken&thingPrincipalType=thingPrincipalType  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return in this operation.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

### [thingName](#)

The name of the thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: Yes

### [thingPrincipalType](#)

The type of the relation you want to filter in the response. If no value is provided in this field, the response will list all principals, including both the `EXCLUSIVE_THING` and `NON_EXCLUSIVE_THING` attachment types.

- `EXCLUSIVE_THING` - Attaches the specified principal to the specified thing, exclusively. The thing will be the only thing that's attached to the principal.
- `NON_EXCLUSIVE_THING` - Attaches the specified principal to the specified thing. Multiple things can be attached to the principal.

Valid Values: `EXCLUSIVE_THING` | `NON_EXCLUSIVE_THING`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "thingPrincipalObjects": [
    {
      "principal": "string",
      "thingPrincipalType": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

### [thingPrincipalObjects](#)

A list of `thingPrincipalObject` that represents the principal and the type of relation it has with the thing.

Type: Array of [ThingPrincipalObject](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListThingRegistrationTaskReports

Service: Amazon IoT

Information about the thing registration tasks.

## Request Syntax

```
GET /thing-registration-tasks/taskId/reports?  
maxResults=maxResults&nextToken=nextToken&reportType=reportType HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### maxResults

The maximum number of results to return per request.

Valid Range: Minimum value of 1. Maximum value of 250.

### nextToken

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

### reportType

The type of task report.

Valid Values: ERRORS | RESULTS

Required: Yes

### taskId

The id of the task.

Length Constraints: Maximum length of 40.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "reportType": "string",
  "resourceLinks": [ "string" ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

### [reportType](#)

The type of task report.

Type: String

Valid Values: ERRORS | RESULTS

### [resourceLinks](#)

Links to the task resources.

Type: Array of strings

Length Constraints: Maximum length of 65535.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListThingRegistrationTasks

Service: Amazon IoT

List bulk thing provisioning tasks.

Requires permission to access the [ListThingRegistrationTasks](#) action.

## Request Syntax

```
GET /thing-registration-tasks?maxResults=maxResults&nextToken=nextToken&status=status
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

### [status](#)

The status of the bulk thing provisioning task.

Valid Values: `InProgress` | `Completed` | `Failed` | `Cancelled` | `Cancelling`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```



```
{  
  "nextToken": "string",  
  "taskIds": [ "string" ]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

### taskIds

A list of bulk thing provisioning task IDs.

Type: Array of strings

Length Constraints: Maximum length of 40.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListThings

Service: Amazon IoT

Lists your things. Use the **attributeName** and **attributeValue** parameters to filter your things. For example, calling `ListThings` with `attributeName=Color` and `attributeValue=Red` retrieves all things in the registry that contain an attribute **Color** with the value **Red**. For more information, see [List Things](#) from the *Amazon IoT Core Developer Guide*.

Requires permission to access the [ListThings](#) action.

## Note

You will not be charged for calling this API if an `Access denied` error is returned. You will also not be charged if no attributes or pagination token was provided in request and no pagination token and no results were returned.

## Request Syntax

```
GET /things?  
attributeName=attributeName&attributeValue=attributeValue&maxResults=maxResults&nextToken=nextToken  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### attributeName

The attribute name used to search for things.

Length Constraints: Maximum length of 128.

Pattern: `[a-zA-Z0-9_.,@/:#-]+`

### attributeValue

The attribute value used to search for things.

Length Constraints: Maximum length of 800.

Pattern: [a-zA-Z0-9\_.,@/:#=#\[\]-]\*

### maxResults

The maximum number of results to return in this operation.

Valid Range: Minimum value of 1. Maximum value of 250.

### nextToken

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

### thingTypeName

The name of the thing type used to search for things.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### usePrefixAttributeValue

When `true`, the action returns the thing resources with attribute values that start with the `attributeValue` provided.

When `false`, or not present, the action returns only the thing resources with attribute values that match the entire `attributeValue` provided.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "things": [
    {
      "attributes": {
        "string" : "string"
      }
    },
  ],
}
```

```
    "thingArn": "string",
    "thingName": "string",
    "thingTypeName": "string",
    "version": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token to use to get the next set of results. Will not be returned if operation has returned all results.

Type: String

### things

The things.

Type: Array of [ThingAttribute](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListThingsInBillingGroup

Service: Amazon IoT

Lists the things you have added to the given billing group.

Requires permission to access the [ListThingsInBillingGroup](#) action.

## Request Syntax

```
GET /billing-groups/billingGroupName/things?maxResults=maxResults&nextToken=nextToken
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### billingGroupName

The name of the billing group.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

Required: Yes

### maxResults

The maximum number of results to return per request.

Valid Range: Minimum value of 1. Maximum value of 250.

### nextToken

To retrieve the next set of results, the nextToken value from a previous response; otherwise **null** to receive the first set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json
```

```
{  
  "nextToken": "string",  
  "things": [ "string" ]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token to use to get the next set of results. Will not be returned if operation has returned all results.

Type: String

### things

A list of things in the billing group.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400



## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListThingsInThingGroup

Service: Amazon IoT

Lists the things in the specified group.

Requires permission to access the [ListThingsInThingGroup](#) action.

## Request Syntax

```
GET /thing-groups/thingGroupName/things?  
maxResults=maxResults&nextToken=nextToken&recursive=recursive HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

### [recursive](#)

When true, list things in this thing group and in all child groups as well.

### [thingGroupName](#)

The thing group name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "things": [ "string" ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

### things

The things in the specified thing group.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_- ]+

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListThingTypes

Service: Amazon IoT

Lists the existing thing types.

Requires permission to access the [ListThingTypes](#) action.

## Request Syntax

```
GET /thing-types?maxResults=maxResults&nextToken=nextToken&thingTypeName=thingTypeName
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return in this operation.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

### [thingTypeName](#)

The name of the thing type.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```

{
  "nextToken": "string",
  "thingTypes": [
    {
      "thingTypeArn": "string",
      "thingTypeMetadata": {
        "creationDate": number,
        "deprecated": boolean,
        "deprecationDate": number
      },
      "thingTypeName": "string",
      "thingTypeProperties": {
        "mqtt5Configuration": {
          "propagatingAttributes": [
            {
              "connectionAttribute": "string",
              "thingAttribute": "string",
              "userPropertyKey": "string"
            }
          ]
        },
        "searchableAttributes": [ "string" ],
        "thingTypeDescription": "string"
      }
    }
  ]
}

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

The token for the next set of results. Will not be returned if operation has returned all results.

Type: String

### [thingTypes](#)

The thing types.

Type: Array of [ThingTypeDefinition](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# ListTopicRuleDestinations

Service: Amazon IoT

Lists all the topic rule destinations in your Amazon Web Services account.

Requires permission to access the [ListTopicRuleDestinations](#) action.

## Request Syntax

```
GET /destinations?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 1000.

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise `null` to receive the first set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "destinationSummaries": [
    {
      "arn": "string",
      "createdAt": number,
      "httpUrlSummary": {
        "confirmationUrl": "string"
      }
    }
  ]
}
```

```
    },
    "lastUpdatedAt": number,
    "status": "string",
    "statusReason": "string",
    "vpcDestinationSummary": {
      "roleArn": "string",
      "securityGroups": [ "string" ],
      "subnetIds": [ "string" ],
      "vpcId": "string"
    }
  }
],
"nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### destinationSummaries

Information about a topic rule destination.

Type: Array of [TopicRuleDestinationSummary](#) objects

### nextToken

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

## Errors

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListTopicRules

Service: Amazon IoT

Lists the rules for the specific topic.

Requires permission to access the [ListTopicRules](#) action.

## Request Syntax

```
GET /rules?  
maxResults=maxResults&nextToken=nextToken&ruleDisabled=ruleDisabled&topic=topic  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return.

Valid Range: Minimum value of 1. Maximum value of 10000.

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

### [ruleDisabled](#)

Specifies whether the rule is disabled.

### [topic](#)

The topic.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "nextToken": "string",
  "rules": [
    {
      "createdAt": number,
      "ruleArn": "string",
      "ruleDisabled": boolean,
      "ruleName": "string",
      "topicPattern": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

### rules

The rules.

Type: Array of [TopicRuleListItem](#) objects

## Errors

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

## ListV2LoggingLevels

Service: Amazon IoT

Lists logging levels.

Requires permission to access the [ListV2LoggingLevels](#) action.

### Request Syntax

```
GET /v2LoggingLevel?maxResults=maxResults&nextToken=nextToken&targetType=targetType
HTTP/1.1
```

### URI Request Parameters

The request uses the following URI parameters.

#### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

#### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

#### [targetType](#)

The type of resource for which you are configuring logging. Must be `THING_Group`.

Valid Values: `DEFAULT` | `THING_GROUP` | `CLIENT_ID` | `SOURCE_IP` | `PRINCIPAL_ID`

### Request Body

The request does not have a request body.

### Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "logTargetConfigurations": [
    {
      "logLevel": "string",
      "logTarget": {
        "targetName": "string",
        "targetType": "string"
      }
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### logTargetConfigurations

The logging configuration for a target.

Type: Array of [LogTargetConfiguration](#) objects

### nextToken

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

## Errors

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400



## **NotConfiguredException**

The resource is not configured.

HTTP Status Code: 404

## **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListViolationEvents

Service: Amazon IoT

Lists the Device Defender security profile violations discovered during the given time period. You can use filters to limit the results to those alerts issued for a particular security profile, behavior, or thing (device).

Requires permission to access the [ListViolationEvents](#) action.

## Request Syntax

```
GET /violation-events?  
behaviorCriteriaType=behaviorCriteriaType&endTime=endTime&listSuppressedAlerts=listSuppressedAlerts  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [behaviorCriteriaType](#)

The criteria for a behavior.

Valid Values: STATIC | STATISTICAL | MACHINE\_LEARNING

### [endTime](#)

The end time for the alerts to be listed.

Required: Yes

### [listSuppressedAlerts](#)

A list of all suppressed alerts.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 250.

### [nextToken](#)

The token for the next set of results.

## securityProfileName

A filter to limit results to those alerts generated by the specified security profile.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

## startTime

The start time for the alerts to be listed.

Required: Yes

## thingName

A filter to limit results to those alerts caused by the specified thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

## verificationState

The verification state of the violation (detect alarm).

Valid Values: FALSE\_POSITIVE | BENIGN\_POSITIVE | TRUE\_POSITIVE | UNKNOWN

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "nextToken": "string",
  "violationEvents": [
    {
      "behavior": {
        "criteria": {
          "comparisonOperator": "string",
          "consecutiveDatapointsToAlarm": number,
          "consecutiveDatapointsToClear": number,
          "durationSeconds": number,
          "mlDetectionConfig": {
```

```

        "confidenceLevel": "string"
    },
    "statisticalThreshold": {
        "statistic": "string"
    },
    "value": {
        "cidrs": [ "string" ],
        "count": number,
        "number": number,
        "numbers": [ number ],
        "ports": [ number ],
        "strings": [ "string" ]
    }
},
"exportMetric": boolean,
"metric": "string",
"metricDimension": {
    "dimensionName": "string",
    "operator": "string"
},
"name": "string",
"suppressAlerts": boolean
},
"metricValue": {
    "cidrs": [ "string" ],
    "count": number,
    "number": number,
    "numbers": [ number ],
    "ports": [ number ],
    "strings": [ "string" ]
},
"securityProfileName": "string",
"thingName": "string",
"verificationState": "string",
"verificationStateDescription": "string",
"violationEventAdditionalInfo": {
    "confidenceLevel": "string"
},
"violationEventTime": number,
"violationEventType": "string",
"violationId": "string"
}
]

```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token that can be used to retrieve the next set of results, or `null` if there are no additional results.

Type: String

### violationEvents

The security profile violation alerts issued for this account during the given time period, potentially filtered by security profile, behavior violated, or thing (device) violating.

Type: Array of [ViolationEvent](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# PutVerificationStateOnViolation

Service: Amazon IoT

Set a verification state and provide a description of that verification state on a violation (detect alarm).

## Request Syntax

```
POST /violations/verification-state/violationId HTTP/1.1
Content-type: application/json
```

```
{
  "verificationState": "string",
  "verificationStateDescription": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### violationId

The violation ID.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\-\-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### verificationState

The verification state of the violation.

Type: String

Valid Values: FALSE\_POSITIVE | BENIGN\_POSITIVE | TRUE\_POSITIVE | UNKNOWN

Required: Yes

### verificationStateDescription

The description of the verification state of the violation (detect alarm).

Type: String

Length Constraints: Maximum length of 1000.

Pattern: `[^\p{Cntrl}]*`

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400



## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# RegisterCACertificate

Service: Amazon IoT

Registers a CA certificate with Amazon IoT Core. There is no limit to the number of CA certificates you can register in your Amazon Web Services account. You can register up to 10 CA certificates with the same CA `subject` field per Amazon Web Services account.

Requires permission to access the [RegisterCACertificate](#) action.

## Request Syntax

```
POST /cacertificate?allowAutoRegistration=allowAutoRegistration&setAsActive=setAsActive
HTTP/1.1
Content-type: application/json

{
  "caCertificate": "string",
  "certificateMode": "string",
  "registrationConfig": {
    "roleArn": "string",
    "templateBody": "string",
    "templateName": "string"
  },
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "verificationCertificate": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [allowAutoRegistration](#)

Allows this CA certificate to be used for auto registration of device certificates.

### [setAsActive](#)

A boolean value that specifies if the CA certificate is set to active.

Valid values: ACTIVE | INACTIVE

## Request Body

The request accepts the following data in JSON format.

### caCertificate

The CA certificate.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65536.

Pattern: `[\s\S]*`

Required: Yes

### certificateMode

Describes the certificate mode in which the Certificate Authority (CA) will be registered. If the `verificationCertificate` field is not provided, set `certificateMode` to be `SNI_ONLY`. If the `verificationCertificate` field is provided, set `certificateMode` to be `DEFAULT`. When `certificateMode` is not provided, it defaults to `DEFAULT`. All the device certificates that are registered using this CA will be registered in the same certificate mode as the CA. For more information about certificate mode for device certificates, see [certificate mode](#).

Type: String

Valid Values: DEFAULT | SNI\_ONLY

Required: No

### registrationConfig

Information about the registration configuration.

Type: [RegistrationConfig](#) object

Required: No

### tags

Metadata which can be used to manage the CA certificate.

**Note**

For URI Request parameters use format: ...key1=value1&key2=value2...

For the CLI command-line parameter use format: &&tags "key1=value1&key2=value2..."

For the cli-input-json file use format: "tags": "key1=value1&key2=value2..."

Type: Array of [Tag](#) objects

Required: No

**verificationCertificate**

The private key verification certificate. If `certificateMode` is `SNI_ONLY`, the `verificationCertificate` field must be empty. If `certificateMode` is `DEFAULT` or not provided, the `verificationCertificate` field must not be empty.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65536.

Pattern: `[\s\S]*`

Required: No

**Response Syntax**

```
HTTP/1.1 200
Content-type: application/json

{
  "certificateArn": "string",
  "certificateId": "string"
}
```

**Response Elements**

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## certificateArn

The CA certificate ARN.

Type: String

## certificateId

The CA certificate identifier.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

## Errors

### **CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **RegistrationCodeValidationException**

The registration code is invalid.

HTTP Status Code: 400

### **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# RegisterCertificate

Service: Amazon IoT

Registers a device certificate with Amazon IoT in the same [certificate mode](#) as the signing CA. If you have more than one CA certificate that has the same subject field, you must specify the CA certificate that was used to sign the device certificate being registered.

Requires permission to access the [RegisterCertificate](#) action.

## Request Syntax

```
POST /certificate/register?setAsActive=setAsActive HTTP/1.1
Content-type: application/json

{
  "caCertificatePem": "string",
  "certificatePem": "string",
  "status": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [setAsActive](#)

*This parameter has been deprecated.*

A boolean value that specifies if the certificate is set to active.

Valid values: ACTIVE | INACTIVE

## Request Body

The request accepts the following data in JSON format.

### [caCertificatePem](#)

The CA certificate used to sign the device certificate being registered.

Type: String



Length Constraints: Minimum length of 1. Maximum length of 65536.

Pattern: `[\s\S]*`

Required: No

### certificatePem

The certificate data, in PEM format.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65536.

Pattern: `[\s\S]*`

Required: Yes

### status

The status of the register certificate request. Valid values that you can use include ACTIVE, INACTIVE, and REVOKED.

Type: String

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING\_TRANSFER | REGISTER\_INACTIVE | PENDING\_ACTIVATION

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificateArn": "string",
  "certificateId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificateArn

The certificate ARN.

Type: String

### certificateId

The certificate identifier.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

## Errors

### **CertificateConflictException**

Unable to verify the CA certificate used to sign the device certificate you are attempting to register. This happens when you have registered more than one CA certificate that has the same subject field and public key.

HTTP Status Code: 409

### **CertificateStateException**

The certificate operation is not allowed.

HTTP Status Code: 406

### **CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

## **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

## **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)

- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# RegisterCertificateWithoutCA

Service: Amazon IoT

Register a certificate that does not have a certificate authority (CA). For supported certificates, consult [Certificate signing algorithms supported by Amazon IoT](#).

## Request Syntax

```
POST /certificate/register-no-ca HTTP/1.1
Content-type: application/json

{
  "certificatePem": "string",
  "status": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### certificatePem

The certificate data, in PEM format.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65536.

Pattern: `[\s\S]*`

Required: Yes

### status

The status of the register certificate request.

Type: String

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING\_TRANSFER | REGISTER\_INACTIVE | PENDING\_ACTIVATION

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificateArn": "string",
  "certificateId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [certificateArn](#)

The Amazon Resource Name (ARN) of the registered certificate.

Type: String

### [certificateId](#)

The ID of the registered certificate. (The last part of the certificate ARN contains the certificate ID.)

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

## Errors

### CertificateStateException

The certificate operation is not allowed.

HTTP Status Code: 406

## **CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

## **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

## **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

## **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# RegisterThing

Service: Amazon IoT

Provisions a thing in the device registry. RegisterThing calls other Amazon IoT control plane APIs. These calls might exceed your account level [Amazon IoT Throttling Limits](#) and cause throttle errors. Please contact [Amazon Customer Support](#) to raise your throttling limits if necessary.

Requires permission to access the [RegisterThing](#) action.

## Request Syntax

```
POST /things HTTP/1.1
Content-type: application/json

{
  "parameters": {
    "string" : "string"
  },
  "templateBody": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [parameters](#)

The parameters for provisioning a thing. See [Provisioning Templates](#) for more information.

Type: String to string map

Key Length Constraints: Minimum length of 0. Maximum length of 2048.

Key Pattern: `[\s\S]*`

Value Length Constraints: Minimum length of 0. Maximum length of 4096.

Value Pattern: `[\s\S]*`

Required: No

### templateBody

The provisioning template. See [Provisioning Devices That Have Device Certificates](#) for more information.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 10240.

Pattern: `[\s\S]*`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificatePem": "string",
  "resourceArns": {
    "string" : "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificatePem

The certificate data, in PEM format.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65536.

Pattern: `[\s\S]*`

## resourceArns

ARNs for the generated resources.

Type: String to string map

## Errors

### **ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceRegistrationFailureException**

The resource registration failed.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# RejectCertificateTransfer

Service: Amazon IoT

Rejects a pending certificate transfer. After Amazon IoT rejects a certificate transfer, the certificate status changes from **PENDING\_TRANSFER** to **INACTIVE**.

To check for pending certificate transfers, call [ListCertificates](#) to enumerate your certificates.

This operation can only be called by the transfer destination. After it is called, the certificate will be returned to the source's account in the INACTIVE state.

Requires permission to access the [RejectCertificateTransfer](#) action.

## Request Syntax

```
PATCH /reject-certificate-transfer/certificateId HTTP/1.1
Content-type: application/json

{
  "rejectReason": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [certificateId](#)

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [rejectReason](#)

The reason the certificate transfer was rejected.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\s\S]*`

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### **TransferAlreadyCompletedException**

You can't revert the certificate transfer because the transfer is already complete.

HTTP Status Code: 410

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# RemoveThingFromBillingGroup

Service: Amazon IoT

Removes the given thing from the billing group.

Requires permission to access the [RemoveThingFromBillingGroup](#) action.

## Note

This call is asynchronous. It might take several seconds for the detachment to propagate.

## Request Syntax

```
PUT /billing-groups/removeThingFromBillingGroup HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "billingGroupArn": "string",
  "billingGroupName": "string",
  "thingArn": "string",
  "thingName": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [billingGroupArn](#)

The ARN of the billing group.

Type: String

Required: No

### [billingGroupName](#)

The name of the billing group.



Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### thingArn

The ARN of the thing to be removed from the billing group.

Type: String

Required: No

### thingName

The name of the thing to be removed from the billing group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

## InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# RemoveThingFromThingGroup

Service: Amazon IoT

Remove the specified thing from the specified group.

You must specify either a `thingGroupArn` or a `thingGroupName` to identify the thing group and either a `thingArn` or a `thingName` to identify the thing to remove from the thing group.

Requires permission to access the [RemoveThingFromThingGroup](#) action.

## Request Syntax

```
PUT /thing-groups/removeThingFromThingGroup HTTP/1.1
Content-type: application/json
```

```
{
  "thingArn": "string",
  "thingGroupArn": "string",
  "thingGroupName": "string",
  "thingName": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [thingArn](#)

The ARN of the thing to remove from the group.

Type: String

Required: No

### [thingGroupArn](#)

The group ARN.

Type: String

Required: No

### thingGroupName

The group name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### thingName

The name of the thing to remove from the group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ReplaceTopicRule

Service: Amazon IoT

Replaces the rule. You must specify all parameters for the new rule. Creating rules is an administrator-level action. Any user who has permission to create rules will be able to access data processed by the rule.

Requires permission to access the [ReplaceTopicRule](#) action.

## Request Syntax

```
PATCH /rules/ruleName HTTP/1.1
Content-type: application/json

{
  "actions": [
    {
      "cloudwatchAlarm": {
        "alarmName": "string",
        "roleArn": "string",
        "stateReason": "string",
        "stateValue": "string"
      },
      "cloudwatchLogs": {
        "batchMode": boolean,
        "logGroupName": "string",
        "roleArn": "string"
      },
      "cloudwatchMetric": {
        "metricName": "string",
        "metricNamespace": "string",
        "metricTimestamp": "string",
        "metricUnit": "string",
        "metricValue": "string",
        "roleArn": "string"
      },
      "dynamoDB": {
        "hashKeyField": "string",
        "hashKeyType": "string",
        "hashKeyValue": "string",
        "operation": "string",
        "payloadField": "string",
        "rangeKeyField": "string",
```

```
    "rangeKeyType": "string",
    "rangeKeyValue": "string",
    "roleArn": "string",
    "tableName": "string"
  },
  "dynamoDBv2": {
    "putItem": {
      "tableName": "string"
    },
    "roleArn": "string"
  },
  "elasticsearch": {
    "endpoint": "string",
    "id": "string",
    "index": "string",
    "roleArn": "string",
    "type": "string"
  },
  "firehose": {
    "batchMode": boolean,
    "deliveryStreamName": "string",
    "roleArn": "string",
    "separator": "string"
  },
  "http": {
    "auth": {
      "sigv4": {
        "roleArn": "string",
        "serviceName": "string",
        "signingRegion": "string"
      }
    },
    "confirmationUrl": "string",
    "headers": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    "url": "string"
  },
  "iotAnalytics": {
    "batchMode": boolean,
    "channelArn": "string",
```

```

    "channelName": "string",
    "roleArn": "string"
  },
  "iotEvents": {
    "batchMode": boolean,
    "inputName": "string",
    "messageId": "string",
    "roleArn": "string"
  },
  "iotSiteWise": {
    "putAssetPropertyValueEntries": [
      {
        "assetId": "string",
        "entryId": "string",
        "propertyAlias": "string",
        "propertyId": "string",
        "propertyValues": [
          {
            "quality": "string",
            "timestamp": {
              "offsetInNanos": "string",
              "timeInSeconds": "string"
            },
            "value": {
              "booleanValue": "string",
              "doubleValue": "string",
              "integerValue": "string",
              "stringValue": "string"
            }
          }
        ]
      }
    ]
  },
  "roleArn": "string"
},
"kafka": {
  "clientProperties": {
    "string": "string"
  },
  "destinationArn": "string",
  "headers": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}

```



```
    }
  ],
  "key": "string",
  "partition": "string",
  "topic": "string"
},
"kinesis": {
  "partitionKey": "string",
  "roleArn": "string",
  "streamName": "string"
},
"lambda": {
  "functionArn": "string"
},
"location": {
  "deviceId": "string",
  "latitude": "string",
  "longitude": "string",
  "roleArn": "string",
  "timestamp": {
    "unit": "string",
    "value": "string"
  },
  "trackerName": "string"
},
"openSearch": {
  "endpoint": "string",
  "id": "string",
  "index": "string",
  "roleArn": "string",
  "type": "string"
},
"republish": {
  "headers": {
    "contentType": "string",
    "correlationData": "string",
    "messageExpiry": "string",
    "payloadFormatIndicator": "string",
    "responseTopic": "string",
    "userProperties": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  }
}
```

```
    ]
  },
  "qos": number,
  "roleArn": "string",
  "topic": "string"
},
"s3": {
  "bucketName": "string",
  "cannedAcl": "string",
  "key": "string",
  "roleArn": "string"
},
"salesforce": {
  "token": "string",
  "url": "string"
},
"sns": {
  "messageFormat": "string",
  "roleArn": "string",
  "targetArn": "string"
},
"sqs": {
  "queueUrl": "string",
  "roleArn": "string",
  "useBase64": boolean
},
"stepFunctions": {
  "executionNamePrefix": "string",
  "roleArn": "string",
  "stateMachineName": "string"
},
"timestream": {
  "databaseName": "string",
  "dimensions": [
    {
      "name": "string",
      "value": "string"
    }
  ],
  "roleArn": "string",
  "tableName": "string",
  "timestamp": {
    "unit": "string",
    "value": "string"
  }
}
```

```
    }
  }
}
],
"awsIotSqlVersion": "string",
"description": "string",
"errorAction": {
  "cloudwatchAlarm": {
    "alarmName": "string",
    "roleArn": "string",
    "stateReason": "string",
    "stateValue": "string"
  },
  "cloudwatchLogs": {
    "batchMode": boolean,
    "logGroupName": "string",
    "roleArn": "string"
  },
  "cloudwatchMetric": {
    "metricName": "string",
    "metricNamespace": "string",
    "metricTimestamp": "string",
    "metricUnit": "string",
    "metricValue": "string",
    "roleArn": "string"
  },
  "dynamoDB": {
    "hashKeyField": "string",
    "hashKeyType": "string",
    "hashKeyValue": "string",
    "operation": "string",
    "payloadField": "string",
    "rangeKeyField": "string",
    "rangeKeyType": "string",
    "rangeKeyValue": "string",
    "roleArn": "string",
    "tableName": "string"
  },
  "dynamoDBv2": {
    "putItem": {
      "tableName": "string"
    },
    "roleArn": "string"
  }
},
```

```
"elasticsearch": {
  "endpoint": "string",
  "id": "string",
  "index": "string",
  "roleArn": "string",
  "type": "string"
},
"firehose": {
  "batchMode": boolean,
  "deliveryStreamName": "string",
  "roleArn": "string",
  "separator": "string"
},
"http": {
  "auth": {
    "sigv4": {
      "roleArn": "string",
      "serviceName": "string",
      "signingRegion": "string"
    }
  },
  "confirmationUrl": "string",
  "headers": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "url": "string"
},
"iotAnalytics": {
  "batchMode": boolean,
  "channelArn": "string",
  "channelName": "string",
  "roleArn": "string"
},
"iotEvents": {
  "batchMode": boolean,
  "inputName": "string",
  "messageId": "string",
  "roleArn": "string"
},
"iotSiteWise": {
  "putAssetPropertyValueEntries": [
```

```

    {
      "assetId": "string",
      "entryId": "string",
      "propertyAlias": "string",
      "propertyId": "string",
      "propertyValues": [
        {
          "quality": "string",
          "timestamp": {
            "offsetInNanos": "string",
            "timeInSeconds": "string"
          },
          "value": {
            "booleanValue": "string",
            "doubleValue": "string",
            "integerValue": "string",
            "stringValue": "string"
          }
        }
      ]
    },
    "roleArn": "string"
  },
  "kafka": {
    "clientProperties": {
      "string" : "string"
    },
    "destinationArn": "string",
    "headers": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    "key": "string",
    "partition": "string",
    "topic": "string"
  },
  "kinesis": {
    "partitionKey": "string",
    "roleArn": "string",
    "streamName": "string"
  },

```

```
"lambda": {
  "functionArn": "string"
},
"location": {
  "deviceId": "string",
  "latitude": "string",
  "longitude": "string",
  "roleArn": "string",
  "timestamp": {
    "unit": "string",
    "value": "string"
  },
  "trackerName": "string"
},
"openSearch": {
  "endpoint": "string",
  "id": "string",
  "index": "string",
  "roleArn": "string",
  "type": "string"
},
"republish": {
  "headers": {
    "contentType": "string",
    "correlationData": "string",
    "messageExpiry": "string",
    "payloadFormatIndicator": "string",
    "responseTopic": "string",
    "userProperties": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  },
  "qos": number,
  "roleArn": "string",
  "topic": "string"
},
"s3": {
  "bucketName": "string",
  "cannedAcl": "string",
  "key": "string",
  "roleArn": "string"
}
```

```

    },
    "salesforce": {
      "token": "string",
      "url": "string"
    },
    "sns": {
      "messageFormat": "string",
      "roleArn": "string",
      "targetArn": "string"
    },
    "sqs": {
      "queueUrl": "string",
      "roleArn": "string",
      "useBase64": boolean
    },
    "stepFunctions": {
      "executionNamePrefix": "string",
      "roleArn": "string",
      "stateMachineName": "string"
    },
    "timestream": {
      "databaseName": "string",
      "dimensions": [
        {
          "name": "string",
          "value": "string"
        }
      ],
      "roleArn": "string",
      "tableName": "string",
      "timestamp": {
        "unit": "string",
        "value": "string"
      }
    }
  },
  "ruleDisabled": boolean,
  "sql": "string"
}

```

## URI Request Parameters

The request uses the following URI parameters.

## ruleName

The name of the rule.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^[a-zA-Z0-9_]+$`

Required: Yes

## **Request Body**

The request accepts the following data in JSON format.

### actions

The actions associated with the rule.

Type: Array of [Action](#) objects

Array Members: Minimum number of 0 items. Maximum number of 10 items.

Required: Yes

### awsIotSqlVersion

The version of the SQL rules engine to use when evaluating the rule.

Type: String

Required: No

### description

The description of the rule.

Type: String

Required: No

### errorAction

The action to take when an error occurs.

Type: [Action](#) object



Required: No

### ruleDisabled

Specifies whether the rule is disabled.

Type: Boolean

Required: No

### sql

The SQL statement used to query the topic. For more information, see [Amazon IoT SQL Reference](#) in the *Amazon IoT Developer Guide*.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### **InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **SqlParseException**

The Rule-SQL expression can't be parsed correctly.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# SearchIndex

Service: Amazon IoT

The query search index.

Requires permission to access the [SearchIndex](#) action.

## Request Syntax

```
POST /indices/search HTTP/1.1
Content-type: application/json

{
  "indexName": "string",
  "maxResults": number,
  "nextToken": "string",
  "queryString": "string",
  "queryVersion": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### indexName

The search index name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

## maxResults

The maximum number of results to return per page at one time. This maximum number cannot exceed 100. The response might contain fewer results but will never contain more. You can use [nextToken](#) to retrieve the next set of results until nextToken returns NULL.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

## nextToken

The token used to get the next set of results, or null if there are no additional results.

Type: String

Required: No

## queryString

The search query string. For more information about the search query syntax, see [Query syntax](#).

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

## queryVersion

The query version.

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "nextToken": "string",
  "thingGroups": [
    {
      "attributes": {
        "string": "string"
      },
      "parentGroupNames": [ "string" ],
      "thingGroupDescription": "string",
      "thingGroupId": "string",
      "thingGroupName": "string"
    }
  ],
  "things": [
    {
      "attributes": {
        "string": "string"
      },
      "connectivity": {
        "connected": boolean,
        "disconnectReason": "string",
        "timestamp": number
      },
      "deviceDefender": "string",
      "shadow": "string",
      "thingGroupNames": [ "string" ],
      "thingId": "string",
      "thingName": "string",
      "thingTypeName": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token used to get the next set of results, or null if there are no additional results.

Type: String

## thingGroups

The thing groups that match the search query.

Type: Array of [ThingGroupDocument](#) objects

## things

The things that match the search query.

Type: Array of [ThingDocument](#) objects

## Errors

### **IndexNotReadyException**

The index is not ready.

HTTP Status Code: 400

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidQueryException**

The query is invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# SetDefaultAuthorizer

Service: Amazon IoT

Sets the default authorizer. This will be used if a websocket connection is made without specifying an authorizer.

Requires permission to access the [SetDefaultAuthorizer](#) action.

## Request Syntax

```
POST /default-authorizer HTTP/1.1
Content-type: application/json

{
  "authorizerName": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [authorizerName](#)

The authorizer name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```



```
{  
  "authorizerArn": "string",  
  "authorizerName": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [authorizerArn](#)

The authorizer ARN.

Type: String

Length Constraints: Maximum length of 2048.

### [authorizerName](#)

The authorizer name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## **ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

## **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

## **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)

- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# SetDefaultPolicyVersion

Service: Amazon IoT

Sets the specified version of the specified policy as the policy's default (operative) version. This action affects all certificates to which the policy is attached. To list the principals the policy is attached to, use the [ListPrincipalPolicies](#) action.

Requires permission to access the [SetDefaultPolicyVersion](#) action.

## Request Syntax

```
PATCH /policies/policyName/version/policyVersionId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### policyName

The policy name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: Yes

### policyVersionId

The policy version ID.

Pattern: `[0-9]+`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# SetLoggingOptions

Service: Amazon IoT

Sets the logging options.

NOTE: use of this command is not recommended. Use `SetV2LoggingOptions` instead.

Requires permission to access the [SetLoggingOptions](#) action.

## Request Syntax

```
POST /loggingOptions HTTP/1.1
Content-type: application/json

{
  "logLevel": "string",
  "roleArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### logLevel

The log level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

Required: No

### roleArn

The ARN of the IAM role that grants access.

Type: String

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)



- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# SetV2LoggingLevel

Service: Amazon IoT

Sets the logging level.

Requires permission to access the [SetV2LoggingLevel](#) action.

## Request Syntax

```
POST /v2LoggingLevel HTTP/1.1
Content-type: application/json

{
  "logLevel": "string",
  "logTarget": {
    "targetName": "string",
    "targetType": "string"
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [logLevel](#)

The log level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

Required: Yes

### [logTarget](#)

The log target.

Type: [LogTarget](#) object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### LimitExceededException

A limit has been exceeded.

HTTP Status Code: 410

### NotConfiguredException

The resource is not configured.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# SetV2LoggingOptions

Service: Amazon IoT

Sets the logging options for the V2 logging service.

Requires permission to access the [SetV2LoggingOptions](#) action.

## Request Syntax

```
POST /v2LoggingOptions HTTP/1.1
Content-type: application/json
```

```
{
  "defaultLogLevel": "string",
  "disableAllLogs": boolean,
  "roleArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [defaultLogLevel](#)

The default logging level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

Required: No

### [disableAllLogs](#)

If true all logs are disabled. The default is false.

Type: Boolean

Required: No

## roleArn

The ARN of the role that allows IoT to write to Cloudwatch logs.

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)

- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# StartAuditMitigationActionsTask

Service: Amazon IoT

Starts a task that applies a set of mitigation actions to the specified target.

Requires permission to access the [StartAuditMitigationActionsTask](#) action.

## Request Syntax

```
POST /audit/mitigationactions/tasks/taskId HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "auditCheckToActionsMapping": {
    "string" : [ "string" ]
  },
  "clientRequestToken": "string",
  "target": {
    "auditCheckToReasonCodeFilter": {
      "string" : [ "string" ]
    },
    "auditTaskId": "string",
    "findingIds": [ "string" ]
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [taskId](#)

A unique identifier for the task. You can use this identifier to check the status of the task or to cancel it.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes



## Request Body

The request accepts the following data in JSON format.

### auditCheckToActionsMapping

For an audit check, specifies which mitigation actions to apply. Those actions must be defined in your Amazon Web Services accounts.

Type: String to array of strings map

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

### clientRequestToken

Each audit mitigation task must have a unique client request token. If you try to start a new task with the same token as a task that already exists, an exception occurs. If you omit this value, a unique client request token is generated automatically.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: ^[a-zA-Z0-9-\_\$]

Required: Yes

### target

Specifies the audit findings to which the mitigation actions are applied. You can apply them to a type of audit check, to all findings from an audit, or to a specific set of findings.

Type: [AuditMitigationActionsTaskTarget](#) object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "taskId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### taskId

The unique identifier for the audit mitigation task. This matches the `taskId` that you specified in the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9_-]+`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

## TaskAlreadyExistsException

This exception occurs if you attempt to start a task with the same task-id as an existing task but with a different clientRequestToken.

HTTP Status Code: 400

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# StartDetectMitigationActionsTask

Service: Amazon IoT

Starts a Device Defender ML Detect mitigation actions task.

Requires permission to access the [StartDetectMitigationActionsTask](#) action.

## Request Syntax

```
PUT /detect/mitigationactions/tasks/taskId HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "actions": [ "string" ],
  "clientRequestToken": "string",
  "includeOnlyActiveViolations": boolean,
  "includeSuppressedAlerts": boolean,
  "target": {
    "behaviorName": "string",
    "securityProfileName": "string",
    "violationIds": [ "string" ]
  },
  "violationEventOccurrenceRange": {
    "endTime": number,
    "startTime": number
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### taskId

The unique identifier of the task.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### actions

The actions to be performed when a device has unexpected behavior.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

### clientRequestToken

Each mitigation action task must have a unique client request token. If you try to create a new task with the same token as a task that already exists, an exception occurs. If you omit this value, Amazon SDKs will automatically generate a unique client request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: ^[a-zA-Z0-9-\_\$]

Required: Yes

### includeOnlyActiveViolations

Specifies to list only active violations.

Type: Boolean

Required: No

### includeSuppressedAlerts

Specifies to include suppressed alerts.

Type: Boolean

Required: No

### target

Specifies the ML Detect findings to which the mitigation actions are applied.

Type: [DetectMitigationActionsTaskTarget](#) object

Required: Yes

### violationEventOccurrenceRange

Specifies the time period of which violation events occurred between.

Type: [ViolationEventOccurrenceRange](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "taskId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### taskId

The unique identifier of the task.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9_-]+`

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### LimitExceededException

A limit has been exceeded.

HTTP Status Code: 410

### TaskAlreadyExistsException

This exception occurs if you attempt to start a task with the same task-id as an existing task but with a different clientRequestToken.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# StartOnDemandAuditTask

Service: Amazon IoT

Starts an on-demand Device Defender audit.

Requires permission to access the [StartOnDemandAuditTask](#) action.

## Request Syntax

```
POST /audit/tasks HTTP/1.1
Content-type: application/json

{
  "targetCheckNames": [ "string" ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [targetCheckNames](#)

Which checks are performed during the audit. The checks you specify must be enabled for your account or an exception occurs. Use [DescribeAccountAuditConfiguration](#) to see the list of all checks, including those that are enabled or [UpdateAccountAuditConfiguration](#) to select which checks are enabled.

Type: Array of strings

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{  
  "taskId": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### taskId

The ID of the on-demand audit you started.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 40.

Pattern: [a-zA-Z0-9\-]+

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# StartThingRegistrationTask

Service: Amazon IoT

Creates a bulk thing provisioning task.

Requires permission to access the [StartThingRegistrationTask](#) action.

## Request Syntax

```
POST /thing-registration-tasks HTTP/1.1
Content-type: application/json
```

```
{
  "inputFileBucket": "string",
  "inputFileKey": "string",
  "roleArn": "string",
  "templateBody": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [inputFileBucket](#)

The S3 bucket that contains the input file.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 256.

Pattern: [a-zA-Z0-9.\_-]+

Required: Yes

### [inputFileKey](#)

The name of input file within the S3 bucket. This file contains a newline delimited JSON file. Each line contains the parameter values to provision one device (thing).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: [a-zA-Z0-9!\_.\*'()-\]/]+

Required: Yes

### roleArn

The IAM role ARN that grants permission the input file.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

### templateBody

The provisioning template.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 10240.

Pattern: [\s\S]\*

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "taskId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## **taskId**

The bulk thing provisioning task ID.

Type: String

Length Constraints: Maximum length of 40.

## **Errors**

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# StopThingRegistrationTask

Service: Amazon IoT

Cancels a bulk thing provisioning task.

Requires permission to access the [StopThingRegistrationTask](#) action.

## Request Syntax

```
PUT /thing-registration-tasks/taskId/cancel HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### taskId

The bulk thing provisioning task ID.

Length Constraints: Maximum length of 40.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.



HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# TagResource

Service: Amazon IoT

Adds to or modifies the tags of the given resource. Tags are metadata which can be used to manage a resource.

Requires permission to access the [TagResource](#) action.

## Request Syntax

```
POST /tags HTTP/1.1
Content-type: application/json

{
  "resourceArn": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [resourceArn](#)

The ARN of the resource.

Type: String

Required: Yes

### [tags](#)

The new or modified tags for the resource.

Type: Array of [Tag](#) objects

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### LimitExceededException

A limit has been exceeded.

HTTP Status Code: 410

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# TestAuthorization

Service: Amazon IoT

Tests if a specified principal is authorized to perform an Amazon IoT action on a specified resource. Use this to test and debug the authorization behavior of devices that connect to the Amazon IoT device gateway.

Requires permission to access the [TestAuthorization](#) action.

## Request Syntax

```
POST /test-authorization?clientId=clientId HTTP/1.1
Content-type: application/json
```

```
{
  "authInfos": [
    {
      "actionType": "string",
      "resources": [ "string" ]
    }
  ],
  "cognitoIdentityPoolId": "string",
  "policyNamesToAdd": [ "string" ],
  "policyNamesToSkip": [ "string" ],
  "principal": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [clientId](#)

The MQTT client ID.

## Request Body

The request accepts the following data in JSON format.

## authInfos

A list of authorization info objects. Simulating authorization will create a response for each authInfo object in the list.

Type: Array of [AuthInfo](#) objects

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: Yes

## cognitoIdentityPoolId

The Cognito identity pool ID.

Type: String

Required: No

## policyNamesToAdd

When testing custom authorization, the policies specified here are treated as if they are attached to the principal being authorized.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: No

## policyNamesToSkip

When testing custom authorization, the policies specified here are treated as if they are not attached to the principal being authorized.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: No

## principal

The principal. Valid principals are CertificateArn (arn:aws:iot:region:accountId:cert/certificateId), thingGroupArn (arn:aws:iot:region:accountId:thinggroup/groupName) and CognitoId (region:id).

Type: String

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "authResults": [
    {
      "allowed": {
        "policies": [
          {
            "policyArn": "string",
            "policyName": "string"
          }
        ]
      },
      "authDecision": "string",
      "authInfo": {
        "actionType": "string",
        "resources": [ "string" ]
      },
      "denied": {
        "explicitDeny": {
          "policies": [
            {
              "policyArn": "string",
              "policyName": "string"
            }
          ]
        },
        "implicitDeny": {
          "policies": [
            {
              "policyArn": "string",
```



```
        "policyName": "string"
      }
    ]
  },
  "missingContextValues": [ "string" ]
}
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### authResults

The authentication results.

Type: Array of [AuthResult](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# TestInvokeAuthorizer

Service: Amazon IoT

Tests a custom authorization behavior by invoking a specified custom authorizer. Use this to test and debug the custom authorization behavior of devices that connect to the Amazon IoT device gateway.

Requires permission to access the [TestInvokeAuthorizer](#) action.

## Request Syntax

```
POST /authorizer/authorizerName/test HTTP/1.1
Content-type: application/json
```

```
{
  "httpContext": {
    "headers": {
      "string": "string"
    },
    "queryString": "string"
  },
  "mqttContext": {
    "clientId": "string",
    "password": blob,
    "username": "string"
  },
  "tlsContext": {
    "serverName": "string"
  },
  "token": "string",
  "tokenSignature": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [authorizerName](#)

The custom authorizer name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=, @- ]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### httpContext

Specifies a test HTTP authorization request.

Type: [HttpContext](#) object

Required: No

### mqttContext

Specifies a test MQTT authorization request.

Type: [MqttContext](#) object

Required: No

### tlsContext

Specifies a test TLS authorization request.

Type: [TlsContext](#) object

Required: No

### token

The token returned by your custom authentication service.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 6144.

Pattern: `[\s\S]*`

Required: No

## tokenSignature

The signature made with the token and your custom authentication service's private key. This value must be Base-64-encoded.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2560.

Pattern: `[A-Za-z0-9+/>]= {0,2}`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "disconnectAfterInSeconds": number,
  "isAuthenticated": boolean,
  "policyDocuments": [ "string" ],
  "principalId": "string",
  "refreshAfterInSeconds": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### disconnectAfterInSeconds

The number of seconds after which the connection is terminated.

Type: Integer

### isAuthenticated

True if the token is authenticated, otherwise false.

Type: Boolean

## policyDocuments

IAM policy documents.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 404600.

Pattern: `[\s\S]*`

## principalId

The principal ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9]+`

## refreshAfterInSeconds

The number of seconds after which the temporary credentials are refreshed.

Type: Integer

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **InvalidResponseException**

The response is invalid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# TransferCertificate

Service: Amazon IoT

Transfers the specified certificate to the specified Amazon Web Services account.

Requires permission to access the [TransferCertificate](#) action.

You can cancel the transfer until it is acknowledged by the recipient.

No notification is sent to the transfer destination's account. It is up to the caller to notify the transfer target.

The certificate being transferred must not be in the ACTIVE state. You can use the [UpdateCertificate](#) action to deactivate it.

The certificate must not have any policies attached to it. You can use the [DetachPolicy](#) action to detach them.

## Request Syntax

```
PATCH /transfer-certificate/certificateId?targetAwsAccount=targetAwsAccount HTTP/1.1  
Content-type: application/json
```

```
{  
  "transferMessage": "string"  
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [certificateId](#)

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: Yes

### [targetAwsAccount](#)

The Amazon Web Services account.



Length Constraints: Fixed length of 12.

Pattern: [0-9]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### transferMessage

The transfer message.

Type: String

Length Constraints: Maximum length of 128.

Pattern: [\\s\\S]\*

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "transferredCertificateArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### transferredCertificateArn

The ARN of the certificate.

Type: String

## Errors

### **CertificateStateException**

The certificate operation is not allowed.

HTTP Status Code: 406

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **TransferConflictException**

You can't transfer the certificate because authorization policies are still attached.

HTTP Status Code: 409

### **UnauthorizedException**

You are not authorized to perform this operation.

## HTTP Status Code: 401

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UntagResource

Service: Amazon IoT

Removes the given tags (metadata) from the resource.

Requires permission to access the [UntagResource](#) action.

## Request Syntax

```
POST /untag HTTP/1.1
Content-type: application/json

{
  "resourceArn": "string",
  "tagKeys": [ "string" ]
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [resourceArn](#)

The ARN of the resource.

Type: String

Required: Yes

### [tagKeys](#)

A list of the keys of the tags to be removed from the resource.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern:  $^([\p{L}\p{Z}\p{N}_\cdot :/=+\-@]^\ast)\$$

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)

- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateAccountAuditConfiguration

Service: Amazon IoT

Configures or reconfigures the Device Defender audit settings for this account. Settings include how audit notifications are sent and which audit checks are enabled or disabled.

Requires permission to access the [UpdateAccountAuditConfiguration](#) action.

## Request Syntax

```
PATCH /audit/configuration HTTP/1.1
Content-type: application/json

{
  "auditCheckConfigurations": {
    "string" : {
      "configuration": {
        "string" : "string"
      },
      "enabled": boolean
    }
  },
  "auditNotificationTargetConfigurations": {
    "string" : {
      "enabled": boolean,
      "roleArn": "string",
      "targetArn": "string"
    }
  },
  "roleArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

## auditCheckConfigurations

Specifies which audit checks are enabled and disabled for this account. Use `DescribeAccountAuditConfiguration` to see the list of all checks, including those that are currently enabled.

Some data collection might start immediately when certain checks are enabled. When a check is disabled, any data collected so far in relation to the check is deleted.

You cannot disable a check if it's used by any scheduled audit. You must first delete the check from the scheduled audit or delete the scheduled audit itself.

On the first call to `UpdateAccountAuditConfiguration`, this parameter is required and must specify at least one enabled check.

Type: String to [AuditCheckConfiguration](#) object map

Required: No

## auditNotificationTargetConfigurations

Information about the targets to which audit notifications are sent.

Type: String to [AuditNotificationTarget](#) object map

Valid Keys: SNS

Required: No

## roleArn

The Amazon Resource Name (ARN) of the role that grants permission to Amazon IoT to access information about your devices, policies, certificates, and other items as required when performing an audit.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

## Response Syntax

```
HTTP/1.1 200
```



## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# UpdateAuditSuppression

Service: Amazon IoT

Updates a Device Defender audit suppression.

## Request Syntax

```
PATCH /audit/suppressions/update HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "checkName": "string",
  "description": "string",
  "expirationDate": number,
  "resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateArn": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "issuerCertificateIdentifier": {
      "issuerCertificateSerialNumber": "string",
      "issuerCertificateSubject": "string",
      "issuerId": "string"
    },
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "string"
  },
  "suppressIndefinitely": boolean
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### checkName

An audit check name. Checks must be enabled for your account. (Use `DescribeAccountAuditConfiguration` to see the list of all checks, including those that are enabled or use `UpdateAccountAuditConfiguration` to select which checks are enabled.)

Type: String

Required: Yes

### description

The description of the audit suppression.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: `[\p{Graph}\x20]*`

Required: No

### expirationDate

The expiration date (epoch timestamp in seconds) that you want the suppression to adhere to.

Type: Timestamp

Required: No

### resourceIdentifier

Information that identifies the noncompliant resource.

Type: [ResourceIdentifier](#) object

Required: Yes

### suppressIndefinitely

Indicates whether a suppression should exist indefinitely or not.

Type: Boolean

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateAuthorizer

Service: Amazon IoT

Updates an authorizer.

Requires permission to access the [UpdateAuthorizer](#) action.

## Request Syntax

```
PUT /authorizer/authorizerName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "authorizerFunctionArn": "string",
  "enableCachingForHttp": boolean,
  "status": "string",
  "tokenKeyName": "string",
  "tokenSigningPublicKeys": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [authorizerName](#)

The authorizer name.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [authorizerFunctionArn](#)

The ARN of the authorizer's Lambda function.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `[\s\S]*`

Required: No

### [enableCachingForHttp](#)

When `true`, the result from the authorizer's Lambda function is cached for the time specified in `refreshAfterInSeconds`. The cached result is used while the device reuses the same HTTP connection.

Type: Boolean

Required: No

### [status](#)

The status of the update authorizer request.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

### [tokenKeyName](#)

The key used to extract the token from the HTTP headers.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9_-]+`

Required: No

### [tokenSigningPublicKeys](#)

The public keys used to verify the token signature.

Type: String to string map



Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `[a-zA-Z0-9:_-]+`

Value Length Constraints: Maximum length of 5120.

Value Pattern: `[\s\S]*`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "authorizerArn": "string",
  "authorizerName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### authorizerArn

The authorizer ARN.

Type: String

Length Constraints: Maximum length of 2048.

### authorizerName

The authorizer name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=, @- ]+`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateBillingGroup

Service: Amazon IoT

Updates information about the billing group.

Requires permission to access the [UpdateBillingGroup](#) action.

## Request Syntax

```
PATCH /billing-groups/billingGroupName HTTP/1.1
Content-type: application/json

{
  "billingGroupProperties": {
    "billingGroupDescription": "string"
  },
  "expectedVersion": number
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [billingGroupName](#)

The name of the billing group.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [billingGroupProperties](#)

The properties of the billing group.

Type: [BillingGroupProperties](#) object

Required: Yes

### expectedVersion

The expected version of the billing group. If the version of the billing group does not match the expected version specified in the request, the `UpdateBillingGroup` request is rejected with a `VersionConflictException`.

Type: Long

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "version": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### version

The latest version of the billing group.

Type: Long

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

## InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# UpdateCACertificate

Service: Amazon IoT

Updates a registered CA certificate.

Requires permission to access the [UpdateCACertificate](#) action.

## Request Syntax

```
PUT /cacertificate/caCertificateId?
newAutoRegistrationStatus=newAutoRegistrationStatus&newStatus=newStatus HTTP/1.1
Content-type: application/json

{
  "registrationConfig": {
    "roleArn": "string",
    "templateBody": "string",
    "templateName": "string"
  },
  "removeAutoRegistration": boolean
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [caCertificateId](#)

The CA certificate identifier.

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: Yes

### [newAutoRegistrationStatus](#)

The new value for the auto registration status. Valid values are: "ENABLE" or "DISABLE".

Valid Values: ENABLE | DISABLE

### [newStatus](#)

The updated status of the CA certificate.



**Note:** The status value REGISTER\_INACTIVE is deprecated and should not be used.

Valid Values: ACTIVE | INACTIVE

## Request Body

The request accepts the following data in JSON format.

### registrationConfig

Information about the registration configuration.

Type: [RegistrationConfig](#) object

Required: No

### removeAutoRegistration

If true, removes auto registration.

Type: Boolean

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# UpdateCertificate

Service: Amazon IoT

Updates the status of the specified certificate. This operation is idempotent.

Requires permission to access the [UpdateCertificate](#) action.

Certificates must be in the ACTIVE state to authenticate devices that use a certificate to connect to Amazon IoT.

Within a few minutes of updating a certificate from the ACTIVE state to any other state, Amazon IoT disconnects all devices that used that certificate to connect. Devices cannot use a certificate that is not in the ACTIVE state to reconnect.

## Request Syntax

```
PUT /certificates/certificateId?newStatus=newStatus HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### certificateId

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: Yes

### newStatus

The new status.

**Note:** Setting the status to PENDING\_TRANSFER or PENDING\_ACTIVATION will result in an exception being thrown. PENDING\_TRANSFER and PENDING\_ACTIVATION are statuses used internally by Amazon IoT. They are not intended for developer use.

**Note:** The status value REGISTER\_INACTIVE is deprecated and should not be used.

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING\_TRANSFER | REGISTER\_INACTIVE | PENDING\_ACTIVATION

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **CertificateStateException**

The certificate operation is not allowed.

HTTP Status Code: 406

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

## ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateCertificateProvider

Service: Amazon IoT

Updates a certificate provider.

Requires permission to access the [UpdateCertificateProvider](#) action.

## Request Syntax

```
PUT /certificate-providers/certificateProviderName HTTP/1.1
Content-type: application/json

{
  "accountDefaultForOperations": [ "string" ],
  "lambdaFunctionArn": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [certificateProviderName](#)

The name of the certificate provider.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=, @- ]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [accountDefaultForOperations](#)

A list of the operations that the certificate provider will use to generate certificates. Valid value: `CreateCertificateFromCsr`.

Type: Array of strings

Array Members: Fixed number of 1 item.

Valid Values: CreateCertificateFromCsr

Required: No

### lambdaFunctionArn

The Lambda function ARN that's associated with the certificate provider.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `[\s\S]*`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "certificateProviderArn": "string",
  "certificateProviderName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificateProviderArn

The ARN of the certificate provider.

Type: String

Length Constraints: Maximum length of 2048.



## certificateProviderName

The name of the certificate provider.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

## HTTP Status Code: 401

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateCommand

Service: Amazon IoT

Update information about a command or mark a command for deprecation.

## Request Syntax

```
PATCH /commands/commandId HTTP/1.1  
Content-type: application/json
```

```
{  
  "deprecated": boolean,  
  "description": "string",  
  "displayName": "string"  
}
```

## URI Request Parameters

The request uses the following URI parameters.

### commandId

The unique identifier of the command to be updated.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### deprecated

A boolean that you can use to specify whether to deprecate a command.

Type: Boolean

Required: No

## description

A short text description of the command.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]*`

Required: No

## displayName

The new user-friendly name to use in the console for the command.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[^\p{C}]*`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "commandId": "string",
  "deprecated": boolean,
  "description": "string",
  "displayName": "string",
  "lastUpdatedAt": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### commandId

The unique identifier of the command.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

### deprecated

The boolean that indicates whether the command was deprecated.

Type: Boolean

### description

The updated text description of the command.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]\*

### displayName

The updated user-friendly display name in the console for the command.

Type: String

Length Constraints: Maximum length of 64.

Pattern: [^\p{C}]\*

### lastUpdatedAt

The date and time (epoch timestamp in seconds) when the command was last updated.

Type: Timestamp

## Errors

### **ConflictException**

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### **InternalServerErrorException**

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **ValidationException**

The request is not valid.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# UpdateCustomMetric

Service: Amazon IoT

Updates a Device Defender detect custom metric.

Requires permission to access the [UpdateCustomMetric](#) action.

## Request Syntax

```
PATCH /custom-metric/metricName HTTP/1.1
Content-type: application/json

{
  "displayName": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [metricName](#)

The name of the custom metric. Cannot be updated.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [displayName](#)

Field represents a friendly name in the console for the custom metric, it doesn't have to be unique. Don't use this name as the metric identifier in the device metric report. Can be updated.

Type: String

Length Constraints: Maximum length of 128.



Pattern: `[\p{Graph}\x20]*`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "creationDate": number,
  "displayName": "string",
  "lastModifiedDate": number,
  "metricArn": "string",
  "metricName": "string",
  "metricType": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### creationDate

The creation date of the custom metric in milliseconds since epoch.

Type: Timestamp

### displayName

A friendly name in the console for the custom metric

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\p{Graph}\x20]*`

### lastModifiedDate

The time the custom metric was last modified in milliseconds since epoch.

Type: Timestamp

### metricArn

The Amazon Resource Number (ARN) of the custom metric.

Type: String

### metricName

The name of the custom metric.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### metricType

The type of the custom metric.

#### **Important**

The type `number` only takes a single metric value as an input, but while submitting the metrics value in the DeviceMetrics report, it must be passed as an array with a single value.

Type: String

Valid Values: `string-list` | `ip-address-list` | `number-list` | `number`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateDimension

Service: Amazon IoT

Updates the definition for a dimension. You cannot change the type of a dimension after it is created (you can delete it and recreate it).

Requires permission to access the [UpdateDimension](#) action.

## Request Syntax

```
PATCH /dimensions/name HTTP/1.1
Content-type: application/json

{
  "stringValues": [ "string" ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [name](#)

A unique identifier for the dimension. Choose something that describes the type and value to make it easy to remember what it does.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_- ]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [stringValues](#)

Specifies the value or list of values for the dimension. For TOPIC\_FILTER dimensions, this is a pattern used to match the MQTT topic (for example, "admin/#").

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "arn": "string",
  "creationDate": number,
  "lastModifiedDate": number,
  "name": "string",
  "stringValue": [ "string" ],
  "type": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### arn

The Amazon Resource Name (ARN) of the created dimension.

Type: String

### creationDate

The date and time, in milliseconds since epoch, when the dimension was initially created.

Type: Timestamp

### lastModifiedDate

The date and time, in milliseconds since epoch, when the dimension was most recently updated.

Type: Timestamp

### name

A unique identifier for the dimension.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

### stringValue

The value or list of values used to scope the dimension. For example, for topic filters, this is the pattern used to match the MQTT topic name.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Length Constraints: Minimum length of 1. Maximum length of 256.

### type

The type of the dimension.

Type: String

Valid Values: TOPIC\_FILTER

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateDomainConfiguration

Service: Amazon IoT

Updates values stored in the domain configuration. Domain configurations for default endpoints can't be updated.

Requires permission to access the [UpdateDomainConfiguration](#) action.

## Request Syntax

```
PUT /domainConfigurations/domainConfigurationName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "applicationProtocol": "string",
  "authenticationType": "string",
  "authorizerConfig": {
    "allowAuthorizerOverride": boolean,
    "defaultAuthorizerName": "string"
  },
  "clientCertificateConfig": {
    "clientCertificateCallbackArn": "string"
  },
  "domainConfigurationStatus": "string",
  "removeAuthorizerConfig": boolean,
  "serverCertificateConfig": {
    "enableOCSPCheck": boolean,
    "ocspAuthorizedResponderArn": "string",
    "ocspLambdaArn": "string"
  },
  "tlsConfig": {
    "securityPolicy": "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [domainConfigurationName](#)

The name of the domain configuration to be updated.



Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w . : - ]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### applicationProtocol

An enumerated string that specifies the application-layer protocol.

- SECURE\_MQTT - MQTT over TLS.
- MQTT\_WSS - MQTT over WebSocket.
- HTTPS - HTTP over TLS.
- DEFAULT - Use a combination of port and Application Layer Protocol Negotiation (ALPN) to specify application\_layer protocol. For more information, see [Device communication protocols](#).

Type: String

Valid Values: SECURE\_MQTT | MQTT\_WSS | HTTPS | DEFAULT

Required: No

### authenticationType

An enumerated string that specifies the authentication type.

- CUSTOM\_AUTH\_X509 - Use custom authentication and authorization with additional details from the X.509 client certificate.
- CUSTOM\_AUTH - Use custom authentication and authorization. For more information, see [Custom authentication and authorization](#).
- AWS\_X509 - Use X.509 client certificates without custom authentication and authorization. For more information, see [X.509 client certificates](#).
- AWS\_SIGV4 - Use Amazon Signature Version 4. For more information, see [IAM users, groups, and roles](#).

- **DEFAULT** - Use a combination of port and Application Layer Protocol Negotiation (ALPN) to specify authentication type. For more information, see [Device communication protocols](#).

Type: String

Valid Values: CUSTOM\_AUTH\_X509 | CUSTOM\_AUTH | AWS\_X509 | AWS\_SIGV4 | DEFAULT

Required: No

### [\*\*authorizerConfig\*\*](#)

An object that specifies the authorization service for a domain.

Type: [AuthorizerConfig](#) object

Required: No

### [\*\*clientCertificateConfig\*\*](#)

An object that specifies the client certificate configuration for a domain.

Type: [ClientCertificateConfig](#) object

Required: No

### [\*\*domainConfigurationStatus\*\*](#)

The status to which the domain configuration should be updated.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

### [\*\*removeAuthorizerConfig\*\*](#)

Removes the authorization configuration from a domain.

Type: Boolean

Required: No

### [\*\*serverCertificateConfig\*\*](#)

The server certificate configuration.

Type: [ServerCertificateConfig](#) object

Required: No

### [tlsConfig](#)

An object that specifies the TLS configuration for a domain.

Type: [TlsConfig](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "domainConfigurationArn": "string",
  "domainConfigurationName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [domainConfigurationArn](#)

The ARN of the domain configuration that was updated.

Type: String

### [domainConfigurationName](#)

The name of the domain configuration that was updated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w. :- ]+`

## Errors

### **CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateDynamicThingGroup

Service: Amazon IoT

Updates a dynamic thing group.

Requires permission to access the [UpdateDynamicThingGroup](#) action.

## Request Syntax

```
PATCH /dynamic-thing-groups/thingGroupName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "expectedVersion": number,
  "indexName": "string",
  "queryString": "string",
  "queryVersion": "string",
  "thingGroupProperties": {
    "attributePayload": {
      "attributes": {
        "string" : "string"
      },
      "merge": boolean
    },
    "thingGroupDescription": "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [thingGroupName](#)

The name of the dynamic thing group to update.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### expectedVersion


The expected version of the dynamic thing group to update.

Type: Long

Required: No

### indexName

The dynamic thing group index to update.

 **Note**

Currently one index is supported: AWS\_Things.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### queryString

The dynamic thing group search query string to update.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### queryVersion

The dynamic thing group query version to update.

**Note**

Currently one query version is supported: "2017-09-30". If not specified, the query version defaults to this value.

Type: String

Required: No

**thingGroupProperties**

The dynamic thing group properties to update.

Type: [ThingGroupProperties](#) object

Required: Yes

**Response Syntax**

```
HTTP/1.1 200
Content-type: application/json

{
  "version": number
}
```

**Response Elements**

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**version**

The dynamic thing group version.

Type: Long



## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidQueryException**

The query is invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **VersionConflictException**

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)

- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateEventConfigurations

Service: Amazon IoT

Updates the event configurations.

Requires permission to access the [UpdateEventConfigurations](#) action.

## Request Syntax

```
PATCH /event-configurations HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "eventConfigurations": {
    "string" : {
      "Enabled": boolean
    }
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [eventConfigurations](#)

The new event configuration values.

Type: String to [Configuration](#) object map

Valid Keys: THING | THING\_GROUP | THING\_TYPE | THING\_GROUP\_MEMBERSHIP | THING\_GROUP\_HIERARCHY | THING\_TYPE\_ASSOCIATION | JOB | JOB\_EXECUTION | POLICY | CERTIFICATE | CA\_CERTIFICATE

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)

- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateFleetMetric

Service: Amazon IoT

Updates the data for a fleet metric.

Requires permission to access the [UpdateFleetMetric](#) action.

## Request Syntax

```
PATCH /fleet-metric/metricName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "aggregationField": "string",
  "aggregationType": {
    "name": "string",
    "values": [ "string" ]
  },
  "description": "string",
  "expectedVersion": number,
  "indexName": "string",
  "period": number,
  "queryString": "string",
  "queryVersion": "string",
  "unit": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [metricName](#)

The name of the fleet metric to update.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_\-\.]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### aggregationField

The field to aggregate.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### aggregationType

The type of the aggregation query.

Type: [AggregationType](#) object

Required: No

### description

The description of the fleet metric.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `[\p{Graph}\x20]*`

Required: No

### expectedVersion

The expected version of the fleet metric record in the registry.

Type: Long

Required: No

### indexName

The name of the index to search.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

### period

The time in seconds between fleet metric emissions. Range [60(1 min), 86400(1 day)] and must be multiple of 60.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 86400.

Required: No

### queryString

The search query string.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### queryVersion

The version of the query.

Type: String

Required: No

### unit

Used to support unit transformation such as milliseconds to seconds. The unit must be supported by [CW metric](#).

Type: String

Valid Values: Seconds | Microseconds | Milliseconds | Bytes | Kilobytes | Megabytes | Gigabytes | Terabytes | Bits | Kilobits | Megabits | Gigabits | Terabits | Percent | Count | Bytes/Second | Kilobytes/Second | Megabytes/Second | Gigabytes/Second | Terabytes/Second | Bits/Second |



Kilobits/Second | Megabits/Second | Gigabits/Second | Terabits/Second |  
Count/Second | None

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### IndexNotReadyException

The index is not ready.

HTTP Status Code: 400

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidAggregationException

The aggregation is invalid.

HTTP Status Code: 400

### InvalidQueryException

The query is invalid.

HTTP Status Code: 400

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateIndexingConfiguration

Service: Amazon IoT

Updates the search configuration.

Requires permission to access the [UpdateIndexingConfiguration](#) action.

## Request Syntax

```
POST /indexing/config HTTP/1.1
Content-type: application/json

{
  "thingGroupIndexingConfiguration": {
    "customFields": [
      {
        "name": "string",
        "type": "string"
      }
    ],
    "managedFields": [
      {
        "name": "string",
        "type": "string"
      }
    ],
    "thingGroupIndexingMode": "string"
  },
  "thingIndexingConfiguration": {
    "customFields": [
      {
        "name": "string",
        "type": "string"
      }
    ],
    "deviceDefenderIndexingMode": "string",
    "filter": {
      "geoLocations": [
        {
          "name": "string",
          "order": "string"
        }
      ]
    }
  },
  ],
}
```

```
    "namedShadowNames": [ "string" ]
  },
  "managedFields": [
    {
      "name": "string",
      "type": "string"
    }
  ],
  "namedShadowIndexingMode": "string",
  "thingConnectivityIndexingMode": "string",
  "thingIndexingMode": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### thingGroupIndexingConfiguration

Thing group indexing configuration.

Type: [ThingGroupIndexingConfiguration](#) object

Required: No

### thingIndexingConfiguration

Thing indexing configuration.

Type: [ThingIndexingConfiguration](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateJob

Service: Amazon IoT

Updates supported fields of the specified job.

Requires permission to access the [UpdateJob](#) action.

## Request Syntax

```
PATCH /jobs/jobId?namespaceId=namespaceId HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "abortConfig": {
    "criteriaList": [
      {
        "action": "string",
        "failureType": "string",
        "minNumberOfExecutedThings": number,
        "thresholdPercentage": number
      }
    ]
  },
  "description": "string",
  "jobExecutionsRetryConfig": {
    "criteriaList": [
      {
        "failureType": "string",
        "numberOfRetries": number
      }
    ]
  },
  "jobExecutionsRolloutConfig": {
    "exponentialRate": {
      "baseRatePerMinute": number,
      "incrementFactor": number,
      "rateIncreaseCriteria": {
        "numberOfNotifiedThings": number,
        "numberOfSucceededThings": number
      }
    }
  },
  "maximumPerMinute": number
},
```



```
"presignedUrlConfig": {
  "expiresInSec": number,
  "roleArn": "string"
},
"timeoutConfig": {
  "inProgressTimeoutInMinutes": number
}
}
```

## URI Request Parameters

The request uses the following URI parameters.

### jobId

The ID of the job to be updated.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

### namespaceId

The namespace used to indicate that a job is a customer-managed job.

When you specify a value for this parameter, Amazon IoT Core sends jobs notifications to MQTT topics that contain the value in the following format.

```
$aws/things/THING_NAME/jobs/JOB_ID/notify-namespace-NAMESPACE_ID/
```

#### Note

The namespaceId feature is only supported by Amazon IoT Greengrass at this time. For more information, see [Setting up Amazon IoT Greengrass core devices](#).

Pattern: [a-zA-Z0-9\_-]+

## Request Body

The request accepts the following data in JSON format.

## **abortConfig**

Allows you to create criteria to abort a job.

Type: [AbortConfig](#) object

Required: No

## **description**

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: No

## **jobExecutionsRetryConfig**

Allows you to create the criteria to retry a job.

Type: [JobExecutionsRetryConfig](#) object

Required: No

## **jobExecutionsRolloutConfig**

Allows you to create a staged rollout of the job.

Type: [JobExecutionsRolloutConfig](#) object

Required: No

## **presignedUrlConfig**

Configuration information for pre-signed S3 URLs.

Type: [PresignedUrlConfig](#) object

Required: No

## **timeoutConfig**

Specifies the amount of time each device has to finish its execution of the job. The timer is started when the job execution status is set to `IN_PROGRESS`. If the job execution status is not set to another terminal state before the time expires, it will be automatically set to `TIMED_OUT`.

Type: [TimeoutConfig](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateMitigationAction

Service: Amazon IoT

Updates the definition for the specified mitigation action.

Requires permission to access the [UpdateMitigationAction](#) action.

## Request Syntax

```
PATCH /mitigationactions/actions/actionName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "actionParams": {
    "addThingsToThingGroupParams": {
      "overrideDynamicGroups": boolean,
      "thingGroupNames": [ "string" ]
    },
    "enableIoTLoggingParams": {
      "logLevel": "string",
      "roleArnForLogging": "string"
    },
    "publishFindingToSnsParams": {
      "topicArn": "string"
    },
    "replaceDefaultPolicyVersionParams": {
      "templateName": "string"
    },
    "updateCACertificateParams": {
      "action": "string"
    },
    "updateDeviceCertificateParams": {
      "action": "string"
    }
  },
  "roleArn": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

## actionName

The friendly name for the mitigation action. You cannot change the name by using `UpdateMitigationAction`. Instead, you must delete and recreate the mitigation action with the new name.

Length Constraints: Maximum length of 128.

Pattern: `[a-zA-Z0-9_-]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### actionParams

Defines the type of action and the parameters for that action.

Type: [MitigationActionParams](#) object

Required: No

### roleArn

The ARN of the IAM role that is used to apply the mitigation action.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "actionArn": "string",
  "actionId": "string"
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### actionArn

The ARN for the new mitigation action.

Type: String

### actionId

A unique identifier for the mitigation action.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# UpdatePackage

Service: Amazon IoT

Updates the supported fields for a specific software package.

Requires permission to access the [UpdatePackage](#) and [GetIndexingConfiguration](#) actions.

## Request Syntax

```
PATCH /packages/packageName?clientToken=clientToken HTTP/1.1
Content-type: application/json

{
  "defaultVersionName": "string",
  "description": "string",
  "unsetDefaultVersion": boolean
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [clientToken](#)

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

### [packageName](#)

The name of the target software package.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9-_.]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### defaultVersionName

The name of the default package version.

**Note:** You cannot name a `defaultVersion` and set `unsetDefaultVersion` equal to `true` at the same time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9-_.]+`

Required: No

### description

The package description.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: `[^\p{C}]+`

Required: No

### unsetDefaultVersion

Indicates whether you want to remove the named default package version from the software package. Set as `true` to remove the default package version.

**Note:** You cannot name a `defaultVersion` and set `unsetDefaultVersion` equal to `true` at the same time.

Type: Boolean

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ConflictException

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### InternalServerError

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdatePackageConfiguration

Service: Amazon IoT

Updates the software package configuration.

Requires permission to access the [UpdatePackageConfiguration](#) and [iam:PassRole](#) actions.

## Request Syntax

```
PATCH /package-configuration?clientToken=clientToken HTTP/1.1
Content-type: application/json

{
  "versionUpdateByJobsConfig": {
    "enabled": boolean,
    "roleArn": "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [clientToken](#)

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

## Request Body

The request accepts the following data in JSON format.

### [versionUpdateByJobsConfig](#)

Configuration to manage job's package version reporting. This updates the thing's reserved named shadow that the job targets.

Type: [VersionUpdateByJobsConfig](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ConflictException

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### InternalServerErrorException

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)

- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdatePackageVersion

Service: Amazon IoT

Updates the supported fields for a specific package version.

Requires permission to access the [UpdatePackageVersion](#) and [GetIndexingConfiguration](#) actions.

## Request Syntax

```
PATCH /packages/packageName/versions/versionName?clientToken=clientToken HTTP/1.1
Content-type: application/json
```

```
{
  "action": "string",
  "artifact": {
    "s3Location": {
      "bucket": "string",
      "key": "string",
      "version": "string"
    }
  },
  "attributes": {
    "string" : "string"
  },
  "description": "string",
  "recipe": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [clientToken](#)

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern:  $\backslash S\{36, 64\}$

### [packageName](#)

The name of the associated software package.



Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_. ]+

Required: Yes

### versionName

The name of the target package version.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_. ]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### action

The status that the package version should be assigned. For more information, see [Package version lifecycle](#).

Type: String

Valid Values: PUBLISH | DEPRECATE

Required: No

### artifact

The various components that make up a software package version.

Type: [PackageVersionArtifact](#) object

Required: No

### attributes

Metadata that can be used to define a package version's configuration. For example, the Amazon S3 file location, configuration options that are being sent to the device or fleet.

**Note:** Attributes can be updated only when the package version is in a draft state.

The combined size of all the attributes on a package version is limited to 3KB.

Type: String to string map

Key Length Constraints: Minimum length of 1.

Key Pattern: [a-zA-Z0-9:\_-]+

Value Length Constraints: Minimum length of 1.

Value Pattern: [^\p{C}]+

Required: No

### description

The package version description.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Pattern: [^\p{C}]+

Required: No

### recipe

The inline job document associated with a software package version used for a quick job deployment.

Type: String

Length Constraints: Maximum length of 3072.

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ConflictException

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### InternalServerErrorException

Internal error from the service that indicates an unexpected error or that the service is unavailable.

HTTP Status Code: 500

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

### ValidationException

The request is not valid.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateProvisioningTemplate

Service: Amazon IoT

Updates a provisioning template.

Requires permission to access the [UpdateProvisioningTemplate](#) action.

## Request Syntax

```
PATCH /provisioning-templates/templateName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "defaultVersionId": number,
  "description": "string",
  "enabled": boolean,
  "preProvisioningHook": {
    "payloadVersion": "string",
    "targetArn": "string"
  },
  "provisioningRoleArn": "string",
  "removePreProvisioningHook": boolean
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [templateName](#)

The name of the provisioning template.

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### defaultVersionId

The ID of the default provisioning template version.

Type: Integer

Required: No

### description

The description of the provisioning template.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

Pattern: [^\p{C}]\*

Required: No

### enabled

True to enable the provisioning template, otherwise false.

Type: Boolean

Required: No

### preProvisioningHook

Updates the pre-provisioning hook template. Only supports template of type FLEET\_PROVISIONING. For more information about provisioning template types, see [type](#).

Type: [ProvisioningHook](#) object

Required: No

### provisioningRoleArn

The ARN of the role associated with the provisioning template. This IoT role grants permission to provision a device.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### [removePreProvisioningHook](#)

Removes pre-provisioning hook template.

Type: Boolean

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# UpdateRoleAlias

Service: Amazon IoT

Updates a role alias.

Requires permission to access the [UpdateRoleAlias](#) action.

## Important

The value of [credentialDurationSeconds](#) must be less than or equal to the maximum session duration of the IAM role that the role alias references. For more information, see [Modifying a role maximum session duration \(Amazon API\)](#) from the Amazon Identity and Access Management User Guide.

## Request Syntax

```
PUT /role-aliases/roleAlias HTTP/1.1
Content-type: application/json

{
  "credentialDurationSeconds": number,
  "roleArn": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [roleAlias](#)

The role alias to update.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@-]+`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### credentialDurationSeconds

The number of seconds the credential will be valid.

This value must be less than or equal to the maximum session duration of the IAM role that the role alias references.

Type: Integer

Valid Range: Minimum value of 900. Maximum value of 43200.

Required: No

### roleArn

The role ARN.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json
```

```
{
  "roleAlias": "string",
  "roleAliasArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## roleAlias

The role alias.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

## roleAliasArn

The role alias ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateScheduledAudit

Service: Amazon IoT

Updates a scheduled audit, including which checks are performed and how often the audit takes place.

Requires permission to access the [UpdateScheduledAudit](#) action.

## Request Syntax

```
PATCH /audit/scheduledaudits/scheduledAuditName HTTP/1.1
Content-type: application/json

{
  "dayOfMonth": "string",
  "dayOfWeek": "string",
  "frequency": "string",
  "targetCheckNames": [ "string" ]
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [scheduledAuditName](#)

The name of the scheduled audit. (Max. 128 chars)

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [dayOfMonth](#)

The day of the month on which the scheduled audit takes place. This can be 1 through 31 or LAST. This field is required if the `frequency` parameter is set to MONTHLY. If days 29-31 are

specified, and the month does not have that many days, the audit takes place on the "LAST" day of the month.

Type: String

Pattern: `^([1-9]| [12][0-9]| 3[01])$|^LAST$`

Required: No

### dayOfWeek

The day of the week on which the scheduled audit takes place. This can be one of SUN, MON, TUE, WED, THU, FRI, or SAT. This field is required if the "frequency" parameter is set to WEEKLY or BIWEEKLY.

Type: String

Valid Values: SUN | MON | TUE | WED | THU | FRI | SAT

Required: No

### frequency

How often the scheduled audit takes place, either DAILY, WEEKLY, BIWEEKLY, or MONTHLY. The start time of each audit is determined by the system.

Type: String

Valid Values: DAILY | WEEKLY | BIWEEKLY | MONTHLY

Required: No

### targetCheckNames

Which checks are performed during the scheduled audit. Checks must be enabled for your account. (Use `DescribeAccountAuditConfiguration` to see the list of all checks, including those that are enabled or use `UpdateAccountAuditConfiguration` to select which checks are enabled.)

Type: Array of strings

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "scheduledAuditArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [scheduledAuditArn](#)

The ARN of the scheduled audit.

Type: String

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# UpdateSecurityProfile

Service: Amazon IoT

Updates a Device Defender security profile.

Requires permission to access the [UpdateSecurityProfile](#) action.

## Request Syntax

```
PATCH /security-profiles/securityProfileName?expectedVersion=expectedVersion HTTP/1.1  
Content-type: application/json
```

```
{  
  "additionalMetricsToRetain": [ "string" ],  
  "additionalMetricsToRetainV2": [  
    {  
      "exportMetric": boolean,  
      "metric": "string",  
      "metricDimension": {  
        "dimensionName": "string",  
        "operator": "string"  
      }  
    }  
  ],  
  "alertTargets": {  
    "string": {  
      "alertTargetArn": "string",  
      "roleArn": "string"  
    }  
  },  
  "behaviors": [  
    {  
      "criteria": {  
        "comparisonOperator": "string",  
        "consecutiveDatapointsToAlarm": number,  
        "consecutiveDatapointsToClear": number,  
        "durationSeconds": number,  
        "mlDetectionConfig": {  
          "confidenceLevel": "string"  
        },  
        "statisticalThreshold": {  
          "statistic": "string"  
        }  
      }  
    }  
  ]  
}
```

```
    "value": {
      "cidrs": [ "string" ],
      "count": number,
      "number": number,
      "numbers": [ number ],
      "ports": [ number ],
      "strings": [ "string" ]
    }
  },
  "exportMetric": boolean,
  "metric": "string",
  "metricDimension": {
    "dimensionName": "string",
    "operator": "string"
  },
  "name": "string",
  "suppressAlerts": boolean
}
],
"deleteAdditionalMetricsToRetain": boolean,
"deleteAlertTargets": boolean,
"deleteBehaviors": boolean,
"deleteMetricsExportConfig": boolean,
"metricsExportConfig": {
  "mqttTopic": "string",
  "roleArn": "string"
},
"securityProfileDescription": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### expectedVersion

The expected version of the security profile. A new version is generated whenever the security profile is updated. If you specify a value that is different from the actual version, a `VersionConflictException` is thrown.

### securityProfileName

The name of the security profile you want to update.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### additionalMetricsToRetain

*This parameter has been deprecated.*

Please use [UpdateSecurityProfile:additionalMetricsToRetainV2](#) instead.

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the profile's behaviors, but it is also retained for any metric specified here. Can be used with custom metrics; cannot be used with dimensions.

Type: Array of strings

Required: No

### additionalMetricsToRetainV2

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the profile's behaviors, but it is also retained for any metric specified here. Can be used with custom metrics; cannot be used with dimensions.

Type: Array of [MetricToRetain](#) objects

Required: No

### alertTargets

Where the alerts are sent. (Alerts are always sent to the console.)

Type: String to [AlertTarget](#) object map

Valid Keys: SNS

Required: No

## behaviors

Specifies the behaviors that, when violated by a device (thing), cause an alert.

Type: Array of [Behavior](#) objects

Array Members: Maximum number of 100 items.

Required: No

## deleteAdditionalMetricsToRetain

If true, delete all `additionalMetricsToRetain` defined for this security profile. If any `additionalMetricsToRetain` are defined in the current invocation, an exception occurs.

Type: Boolean

Required: No

## deleteAlertTargets

If true, delete all `alertTargets` defined for this security profile. If any `alertTargets` are defined in the current invocation, an exception occurs.

Type: Boolean

Required: No

## deleteBehaviors

If true, delete all `behaviors` defined for this security profile. If any `behaviors` are defined in the current invocation, an exception occurs.

Type: Boolean

Required: No

## deleteMetricsExportConfig

Set the value as true to delete metrics export related configurations.

Type: Boolean

Required: No

## metricsExportConfig

Specifies the MQTT topic and role ARN required for metric export.

Type: [MetricsExportConfig](#) object

Required: No

### [securityProfileDescription](#)

A description of the security profile.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: `[\p{Graph}\x20]*`

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "additionalMetricsToRetain": [ "string" ],
  "additionalMetricsToRetainV2": [
    {
      "exportMetric": boolean,
      "metric": "string",
      "metricDimension": {
        "dimensionName": "string",
        "operator": "string"
      }
    }
  ],
  "alertTargets": {
    "string" : {
      "alertTargetArn": "string",
      "roleArn": "string"
    }
  },
  "behaviors": [
    {
      "criteria": {
        "comparisonOperator": "string",
        "consecutiveDatapointsToAlarm": number,
```

```

    "consecutiveDatapointsToClear": number,
    "durationSeconds": number,
    "mlDetectionConfig": {
      "confidenceLevel": "string"
    },
    "statisticalThreshold": {
      "statistic": "string"
    },
    "value": {
      "cidrs": [ "string" ],
      "count": number,
      "number": number,
      "numbers": [ number ],
      "ports": [ number ],
      "strings": [ "string" ]
    }
  },
  "exportMetric": boolean,
  "metric": "string",
  "metricDimension": {
    "dimensionName": "string",
    "operator": "string"
  },
  "name": "string",
  "suppressAlerts": boolean
}
],
"creationDate": number,
"lastModifiedDate": number,
"metricsExportConfig": {
  "mqttTopic": "string",
  "roleArn": "string"
},
"securityProfileArn": "string",
"securityProfileDescription": "string",
"securityProfileName": "string",
"version": number
}

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## additionalMetricsToRetain

*This parameter has been deprecated.*

Please use [UpdateSecurityProfile:additionalMetricsToRetainV2](#) instead.

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the security profile's behaviors, but it is also retained for any metric specified here.

Type: Array of strings

## additionalMetricsToRetainV2

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the profile's behaviors, but it is also retained for any metric specified here. Can be used with custom metrics; cannot be used with dimensions.

Type: Array of [MetricToRetain](#) objects

## alertTargets

Where the alerts are sent. (Alerts are always sent to the console.)

Type: String to [AlertTarget](#) object map

Valid Keys: SNS

## behaviors

Specifies the behaviors that, when violated by a device (thing), cause an alert.

Type: Array of [Behavior](#) objects

Array Members: Maximum number of 100 items.

## creationDate

The time the security profile was created.

Type: Timestamp

## lastModifiedDate

The time the security profile was last modified.

Type: Timestamp

### metricsExportConfig

Specifies the MQTT topic and role ARN required for metric export.

Type: [MetricsExportConfig](#) object

### securityProfileArn

The ARN of the security profile that was updated.

Type: String

### securityProfileDescription

The description of the security profile.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: `[\p{Graph}\x20]*`

### securityProfileName

The name of the security profile that was updated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

### version

The updated version of the security profile.

Type: Long

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500



## InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# UpdateStream

Service: Amazon IoT

Updates an existing stream. The stream version will be incremented by one.

Requires permission to access the [UpdateStream](#) action.

## Request Syntax

```
PUT /streams/streamId HTTP/1.1
Content-type: application/json

{
  "description": "string",
  "files": [
    {
      "fileId": number,
      "s3Location": {
        "bucket": "string",
        "key": "string",
        "version": "string"
      }
    }
  ],
  "roleArn": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [streamId](#)

The stream ID.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### description

The description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: No

### files

The files associated with the stream.

Type: Array of [StreamFile](#) objects

Array Members: Minimum number of 1 item. Maximum number of 50 items.

Required: No

### roleArn

An IAM role that allows the IoT service principal assumes to access your S3 files.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "description": "string",
```

```
"streamArn": "string",  
"streamId": "string",  
"streamVersion": number  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### description

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

### streamArn

The stream ARN.

Type: String

### streamId

The stream ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

### streamVersion

The stream version.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 65535.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateThing

Service: Amazon IoT

Updates the data for a thing.

Requires permission to access the [UpdateThing](#) action.

## Request Syntax

```
PATCH /things/thingName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "attributePayload": {
    "attributes": {
      "string" : "string"
    },
    "merge": boolean
  },
  "expectedVersion": number,
  "removeThingType": boolean,
  "thingTypeName": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [thingName](#)

The name of the thing to update.

You can't change a thing's name. To change a thing's name, you must create a new thing, give it the new name, and then delete the old thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes



## Request Body

The request accepts the following data in JSON format.

### attributePayload

A list of thing attributes, a JSON string containing name-value pairs. For example:

```
{\"attributes\":{\"name1\":\"value2\"}}
```

This data is used to add new attributes or update existing attributes.

Type: [AttributePayload](#) object

Required: No

### expectedVersion

The expected version of the thing record in the registry. If the version of the record in the registry does not match the expected version specified in the request, the UpdateThing request is rejected with a `VersionConflictException`.

Type: Long

Required: No

### removeThingType

Remove a thing type association. If **true**, the association is removed.

Type: Boolean

Required: No

### thingTypeName

The name of the thing type.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## VersionConflictException

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateThingGroup

Service: Amazon IoT

Update a thing group.

Requires permission to access the [UpdateThingGroup](#) action.

## Request Syntax

```
PATCH /thing-groups/thingGroupName HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "expectedVersion": number,
  "thingGroupProperties": {
    "attributePayload": {
      "attributes": {
        "string" : "string"
      },
      "merge": boolean
    },
    "thingGroupDescription": "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [thingGroupName](#)

The thing group to update.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_- ]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

## expectedVersion

The expected version of the thing group. If this does not match the version of the thing group being updated, the update will fail.

Type: Long

Required: No

## thingGroupProperties

The thing group properties.

Type: [ThingGroupProperties](#) object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "version": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### version

The version of the updated thing group.

Type: Long

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **VersionConflictException**

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

HTTP Status Code: 409

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)

- [Amazon SDK for Ruby V3](#)

# UpdateThingGroupsForThing

Service: Amazon IoT

Updates the groups to which the thing belongs.

Requires permission to access the [UpdateThingGroupsForThing](#) action.

## Request Syntax

```
PUT /thing-groups/updateThingGroupsForThing HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "overrideDynamicGroups": boolean,
  "thingGroupsToAdd": [ "string" ],
  "thingGroupsToRemove": [ "string" ],
  "thingName": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [overrideDynamicGroups](#)

Override dynamic thing groups with static thing groups when 10-group limit is reached. If a thing belongs to 10 thing groups, and one or more of those groups are dynamic thing groups, adding a thing to a static group removes the thing from the last dynamic group.

Type: Boolean

Required: No

### [thingGroupsToAdd](#)

The groups to which the thing will be added.

Type: Array of strings



Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### thingGroupsToRemove

The groups from which the thing will be removed.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### thingName

The thing whose group memberships will be updated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateThingType

Service: Amazon IoT

Updates a thing type.

## Request Syntax

```
PATCH /thing-types/thingTypeName HTTP/1.1
Content-type: application/json

{
  "thingTypeProperties": {
    "mqtt5Configuration": {
      "propagatingAttributes": [
        {
          "connectionAttribute": "string",
          "thingAttribute": "string",
          "userPropertyKey": "string"
        }
      ]
    },
    "searchableAttributes": [ "string" ],
    "thingTypeDescription": "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### thingTypeName

The name of a thing type.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [thingTypeProperties](#)

The ThingTypeProperties contains information about the thing type including: a thing type description, and a list of searchable thing attribute names.

Type: [ThingTypeProperties](#) object

Required: No

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateTopicRuleDestination

Service: Amazon IoT

Updates a topic rule destination. You use this to change the status, endpoint URL, or confirmation URL of the destination.

Requires permission to access the [UpdateTopicRuleDestination](#) action.

## Request Syntax

```
PATCH /destinations HTTP/1.1
Content-type: application/json

{
  "arn": "string",
  "status": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### [arn](#)

The ARN of the topic rule destination.

Type: String

Required: Yes

### [status](#)

The status of the topic rule destination. Valid values are:

IN\_PROGRESS

A topic rule destination was created but has not been confirmed. You can set status to IN\_PROGRESS by calling UpdateTopicRuleDestination. Calling

`UpdateTopicRuleDestination` causes a new confirmation challenge to be sent to your confirmation endpoint.

#### ENABLED

Confirmation was completed, and traffic to this destination is allowed. You can set status to `DISABLED` by calling `UpdateTopicRuleDestination`.

#### DISABLED

Confirmation was completed, and traffic to this destination is not allowed. You can set status to `ENABLED` by calling `UpdateTopicRuleDestination`.

#### ERROR

Confirmation could not be completed, for example if the confirmation timed out. You can call `GetTopicRuleDestination` for details about the error. You can set status to `IN_PROGRESS` by calling `UpdateTopicRuleDestination`. Calling `UpdateTopicRuleDestination` causes a new confirmation challenge to be sent to your confirmation endpoint.

Type: String

Valid Values: `ENABLED` | `IN_PROGRESS` | `DISABLED` | `ERROR` | `DELETING`

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### `ConflictingResourceUpdateException`

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

### **InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)





# ValidateSecurityProfileBehaviors

Service: Amazon IoT

Validates a Device Defender security profile behaviors specification.

Requires permission to access the [ValidateSecurityProfileBehaviors](#) action.

## Request Syntax

```
POST /security-profile-behaviors/validate HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "behaviors": [
    {
      "criteria": {
        "comparisonOperator": "string",
        "consecutiveDatapointsToAlarm": number,
        "consecutiveDatapointsToClear": number,
        "durationSeconds": number,
        "mlDetectionConfig": {
          "confidenceLevel": "string"
        },
        "statisticalThreshold": {
          "statistic": "string"
        },
        "value": {
          "cidrs": [ "string" ],
          "count": number,
          "number": number,
          "numbers": [ number ],
          "ports": [ number ],
          "strings": [ "string" ]
        }
      },
      "exportMetric": boolean,
      "metric": "string",
      "metricDimension": {
        "dimensionName": "string",
        "operator": "string"
      },
      "name": "string",
      "suppressAlerts": boolean
    }
  ]
}
```

```
    }  
  ]  
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### behaviors

Specifies the behaviors that, when violated by a device (thing), cause an alert.

Type: Array of [Behavior](#) objects

Array Members: Maximum number of 100 items.

Required: Yes

## Response Syntax

```
HTTP/1.1 200  
Content-type: application/json  
  
{  
  "valid": boolean,  
  "validationErrors": [  
    {  
      "errorMessage": "string"  
    }  
  ]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## valid

True if the behaviors were valid.

Type: Boolean

## validationErrors

The list of any errors found in the behaviors.

Type: Array of [ValidationError](#) objects

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

## Amazon IoT data

The following actions are supported by Amazon IoT data:

- [DeleteThingShadow](#)
- [GetRetainedMessage](#)
- [GetThingShadow](#)
- [ListNamedShadowsForThing](#)
- [ListRetainedMessages](#)
- [Publish](#)
- [UpdateThingShadow](#)

# DeleteThingShadow

Service: Amazon IoT data

Deletes the shadow for the specified thing.

Requires permission to access the [DeleteThingShadow](#) action.

For more information, see [DeleteThingShadow](#) in the Amazon IoT Developer Guide.

## Request Syntax

```
DELETE /things/thingName/shadow?name=shadowName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### shadowName

The name of the shadow.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [ $\$$ a-zA-Z0-9: \_- ]+

### thingName

The name of the thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_- ]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

*payload*

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The response returns the following as the HTTP body.

### payload

The state information, in JSON format.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **MethodNotAllowedException**

The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## UnsupportedDocumentEncodingException

The document encoding is not supported.

HTTP Status Code: 415

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# GetRetainedMessage

Service: Amazon IoT data

Gets the details of a single retained message for the specified topic.

This action returns the message payload of the retained message, which can incur messaging costs. To list only the topic names of the retained messages, call [ListRetainedMessages](#).

Requires permission to access the [GetRetainedMessage](#) action.

For more information about messaging costs, see [Amazon IoT Core pricing - Messaging](#).

## Request Syntax

```
GET /retainedMessage/topic HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### topic

The topic name of the retained message to retrieve.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "lastModifiedTime": number,
  "payload": blob,
  "qos": number,
  "topic": "string",
```

```
"userProperties": blob  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### lastModifiedTime

The Epoch date and time, in milliseconds, when the retained message was stored by Amazon IoT.

Type: Long

### payload

The Base64-encoded message payload of the retained message body.

Type: Base64-encoded binary data object

### qos

The quality of service (QoS) level used to publish the retained message.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 1.

### topic

The topic name to which the retained message was published.

Type: String

### userProperties

A base64-encoded JSON string that includes an array of JSON objects, or null if the retained message doesn't include any user properties.

The following example `userProperties` parameter is a JSON string that represents two user properties. Note that it will be base64-encoded:

```
[{"deviceName": "alpha"}, {"deviceCnt": "45"}]
```

Type: Base64-encoded binary data object

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **MethodNotAllowedException**

The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetThingShadow

Service: Amazon IoT data

Gets the shadow for the specified thing.

Requires permission to access the [GetThingShadow](#) action.

For more information, see [GetThingShadow](#) in the Amazon IoT Developer Guide.

## Request Syntax

```
GET /things/thingName/shadow?name=shadowName HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### shadowName

The name of the shadow.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [ $\$$ a-zA-Z0-9: \_- ]+

### thingName

The name of the thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_- ]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

*payload*

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The response returns the following as the HTTP body.

### payload

The state information, in JSON format.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **MethodNotAllowedException**

The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## UnsupportedDocumentEncodingException

The document encoding is not supported.

HTTP Status Code: 415

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListNamedShadowsForThing

Service: Amazon IoT data

Lists the shadows for the specified thing.

Requires permission to access the [ListNamedShadowsForThing](#) action.

## Request Syntax

```
GET /api/things/shadow/ListNamedShadowsForThing/thingName?  
nextToken=nextToken&pageSize=pageSize HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [nextToken](#)

The token to retrieve the next set of results.

### [pageSize](#)

The result page size.

Valid Range: Minimum value of 1. Maximum value of 100.

### [thingName](#)

The name of the thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```



```
Content-type: application/json
```

```
{  
  "nextToken": "string",  
  "results": [ "string" ],  
  "timestamp": number  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextToken](#)

The token to use to get the next set of results, or **null** if there are no additional results.

Type: String

### [results](#)

The list of shadows for the specified thing.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [ $\$a-zA-Z0-9: \_ -$ ]+

### [timestamp](#)

The Epoch date and time the response was generated by Amazon IoT.

Type: Long

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

## **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

## **MethodNotAllowedException**

The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405

## **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

## **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

## **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListRetainedMessages

Service: Amazon IoT data

Lists summary information about the retained messages stored for the account.

This action returns only the topic names of the retained messages. It doesn't return any message payloads. Although this action doesn't return a message payload, it can still incur messaging costs.

To get the message payload of a retained message, call [GetRetainedMessage](#) with the topic name of the retained message.

Requires permission to access the [ListRetainedMessages](#) action.

For more information about messaging costs, see [Amazon IoT Core pricing - Messaging](#).

## Request Syntax

```
GET /retainedMessage?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 200.

### [nextToken](#)

To retrieve the next set of results, the `nextToken` value from a previous response; otherwise **null** to receive the first set of results.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "nextToken": "string",
  "retainedTopics": [
    {
      "lastModifiedTime": number,
      "payloadSize": number,
      "qos": number,
      "topic": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token for the next set of results, or null if there are no additional results.

Type: String

### retainedTopics

A summary list the account's retained messages. The information returned doesn't include the message payloads of the retained messages.

Type: Array of [RetainedMessageSummary](#) objects

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **MethodNotAllowedException**

The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

### **UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# Publish

Service: Amazon IoT data

Publishes an MQTT message.

Requires permission to access the [Publish](#) action.

For more information about MQTT messages, see [MQTT Protocol](#) in the Amazon IoT Developer Guide.

For more information about messaging costs, see [Amazon IoT Core pricing - Messaging](#).

## Request Syntax

```
POST /topics/topic?
contentType=contentType&messageExpiry=messageExpiry&qos=qos&responseTopic=responseTopic&retain=
HTTP/1.1
x-amz-mqtt5-user-properties: userProperties
x-amz-mqtt5-payload-format-indicator: payloadFormatIndicator
x-amz-mqtt5-correlation-data: correlationData

payload
```

## URI Request Parameters

The request uses the following URI parameters.

### [contentType](#)

A UTF-8 encoded string that describes the content of the publishing message.

### [correlationData](#)

The base64-encoded binary data used by the sender of the request message to identify which request the response message is for when it's received. `correlationData` is an HTTP header value in the API.

### [messageExpiry](#)

A user-defined integer value that represents the message expiry interval in seconds. If absent, the message doesn't expire. For more information about the limits of `messageExpiry`, see [Amazon IoT Core message broker and protocol limits and quotas](#) from the Amazon Reference Guide.



## payloadFormatIndicator

An Enum string value that indicates whether the payload is formatted as UTF-8. `payloadFormatIndicator` is an HTTP header value in the API.

Valid Values: UNSPECIFIED\_BYTES | UTF8\_DATA

## qos

The Quality of Service (QoS) level. The default QoS level is 0.

Valid Range: Minimum value of 0. Maximum value of 1.

## responseTopic

A UTF-8 encoded string that's used as the topic name for a response message. The response topic is used to describe the topic which the receiver should publish to as part of the request-response flow. The topic must not contain wildcard characters.

## retain

A Boolean value that determines whether to set the RETAIN flag when the message is published.

Setting the RETAIN flag causes the message to be retained and sent to new subscribers to the topic.

Valid values: `true` | `false`

Default value: `false`

## topic

The name of the MQTT topic.

Required: Yes

## userProperties

A JSON string that contains an array of JSON objects. If you don't use Amazon SDK or Amazon CLI, you must encode the JSON string to base64 format before adding it to the HTTP header. `userProperties` is an HTTP header value in the API.

The following example `userProperties` parameter is a JSON string which represents two User Properties. Note that it needs to be base64-encoded:

```
[{"deviceName": "alpha"}, {"deviceCnt": "45"}]
```

## Request Body

The request accepts the following binary data.

### [payload](#)

The message body. MQTT accepts text, binary, and empty (null) message payloads.

Publishing an empty (null) payload with **retain** = true deletes the retained message identified by **topic** from Amazon IoT Core.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **MethodNotAllowedException**

The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateThingShadow

Service: Amazon IoT data

Updates the shadow for the specified thing.

Requires permission to access the [UpdateThingShadow](#) action.

For more information, see [UpdateThingShadow](#) in the Amazon IoT Developer Guide.

## Request Syntax

```
POST /things/thingName/shadow?name=shadowName HTTP/1.1
```

```
payload
```

## URI Request Parameters

The request uses the following URI parameters.

### [shadowName](#)

The name of the shadow.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [ $\$$ a-zA-Z0-9: \_- ]+

### [thingName](#)

The name of the thing.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_- ]+

Required: Yes

## Request Body

The request accepts the following binary data.

## payload

The state information, in JSON format.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

```
payload
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The response returns the following as the HTTP body.

## payload

The state information, in JSON format.

## Errors

### ConflictException

The specified version does not match the version of the document.

HTTP Status Code: 409

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## MethodNotAllowedException

The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405

## RequestEntityTooLargeException

The payload exceeds the maximum size allowed.

HTTP Status Code: 413

## ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

## UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

## UnsupportedDocumentEncodingException

The document encoding is not supported.

HTTP Status Code: 415

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

## Amazon IoT jobs data

The following actions are supported by Amazon IoT jobs data:

- [DescribeJobExecution](#)
- [GetPendingJobExecutions](#)
- [StartCommandExecution](#)
- [StartNextPendingJobExecution](#)
- [UpdateJobExecution](#)

## DescribeJobExecution

Service: Amazon IoT jobs data

Gets details of a job execution.

Requires permission to access the [DescribeJobExecution](#) action.

### Request Syntax

```
GET /things/thingName/jobs/jobId?  
executionNumber=executionNumber&includeJobDocument=includeJobDocument HTTP/1.1
```

### URI Request Parameters

The request uses the following URI parameters.

#### [executionNumber](#)

Optional. A number that identifies a particular job execution on a particular device. If not specified, the latest job execution is returned.

#### [includeJobDocument](#)

Optional. Unless set to false, the response contains the job document. The default is true.

#### [jobId](#)

The unique identifier assigned to this job when it was created.

Pattern: `[a-zA-Z0-9_-]+|^\\$next`

Required: Yes

#### [thingName](#)

The thing name associated with the device the job execution is running on.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: Yes



## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "execution": {
    "approximateSecondsBeforeTimedOut": number,
    "executionNumber": number,
    "jobDocument": "string",
    "jobId": "string",
    "lastUpdatedAt": number,
    "queuedAt": number,
    "startedAt": number,
    "status": "string",
    "statusDetails": {
      "string" : "string"
    },
    "thingName": "string",
    "versionNumber": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### execution

Contains data about a job execution.

Type: [JobExecution](#) object

## Errors

### **CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The contents of the request were invalid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **TerminalStateException**

The job is in a terminal state.

HTTP Status Code: 410

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)

- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetPendingJobExecutions

Service: Amazon IoT jobs data

Gets the list of all jobs for a thing that are not in a terminal status.

Requires permission to access the [GetPendingJobExecutions](#) action.

## Request Syntax

```
GET /things/thingName/jobs HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### thingName

The name of the thing that is executing the job.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_- ]+

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "inProgressJobs": [
    {
      "executionNumber": number,
      "jobId": "string",
      "lastUpdatedAt": number,
      "queuedAt": number,
      "startedAt": number,

```

```
    "versionNumber": number
  }
],
"queuedJobs": [
  {
    "executionNumber": number,
    "jobId": "string",
    "lastUpdatedAt": number,
    "queuedAt": number,
    "startedAt": number,
    "versionNumber": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### inProgressJobs

A list of JobExecutionSummary objects with status IN\_PROGRESS.

Type: Array of [JobExecutionSummary](#) objects

### queuedJobs

A list of JobExecutionSummary objects with status QUEUED.

Type: Array of [JobExecutionSummary](#) objects

## Errors

### CertificateValidationException

The certificate is invalid.

HTTP Status Code: 400

### InvalidRequestException

The contents of the request were invalid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# StartCommandExecution

Service: Amazon IoT jobs data

Using the command created with the CreateCommand API, start a command execution on a specific device.

## Note

The IAM permissions are derived from the `iot:StartCommandExecution` action. For more information on the IAM permissions policy statement, see [Start a command execution \(Amazon CLI\) > Sample IAM policy](#).

## Request Syntax

```
POST /command-executions HTTP/1.1
Content-type: application/json

{
  "clientToken": "string",
  "commandArn": "string",
  "executionTimeoutSeconds": number,
  "parameters": {
    "string": {
      "B": boolean,
      "BIN": blob,
      "D": number,
      "I": number,
      "L": number,
      "S": "string",
      "UL": "string"
    }
  },
  "targetArn": "string"
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

### clientToken

The client token is used to implement idempotency. It ensures that the request completes no more than one time. If you retry a request with the same token and the same parameters, the request will complete successfully. However, if you retry the request using the same token but different parameters, an HTTP 409 conflict occurs. If you omit this value, Amazon SDKs will automatically generate a unique client request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^\[\x21-\x7E]+\`

Required: No

### commandArn

The Amazon Resource Number (ARN) of the command. For example, `arn:aws:iot:<region>:<accountid>:command/<commandName>`

Type: String

Required: Yes

### executionTimeoutSeconds

Specifies the amount of time in second the device has to finish the command execution. A timer is started as soon as the command execution is created. If the command execution status is not set to another terminal state before the timer expires, it will automatically update to `TIMED_OUT`.

Type: Long

Valid Range: Minimum value of 1.

Required: No

### parameters

A list of parameters that are required by the `StartCommandExecution` API when performing the command on a device.



Type: String to [CommandParameterValue](#) object map

Map Entries: Maximum number of items.

Key Length Constraints: Minimum length of 1. Maximum length of 192.

Key Pattern: `^[. $a-zA-Z0-9_-]+$`

Required: No

### [targetArn](#)

The Amazon Resource Number (ARN) of the device where the command execution is occurring.

Type: String

Length Constraints: Maximum length of 2048.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "executionId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [executionId](#)

A unique identifier for the command execution.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_- ]+

## Errors

### **ConflictException**

A conflict has occurred when performing the API request.

HTTP Status Code: 409

### **InternalServerErrorException**

An internal server error occurred when performing the API request.

HTTP Status Code: 500

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceQuotaExceededException**

The service quota has been exceeded for this request.

HTTP Status Code: 402

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

### **ValidationException**

A validation error occurred when performing the API request.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# StartNextPendingJobExecution

Service: Amazon IoT jobs data

Gets and starts the next pending (status IN\_PROGRESS or QUEUED) job execution for a thing.

Requires permission to access the [StartNextPendingJobExecution](#) action.

## Request Syntax

```
PUT /things/thingName/jobs/$next HTTP/1.1
Content-type: application/json

{
  "statusDetails": {
    "string" : "string"
  },
  "stepTimeoutInMinutes": number
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [thingName](#)

The name of the thing associated with the device.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [statusDetails](#)

A collection of name/value pairs that describe the status of the job execution. If not specified, the statusDetails are unchanged.

The maximum length of the value in the name/value pair is 1,024 characters.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: [a-zA-Z0-9:\_-]+

Value Length Constraints: Minimum length of 1.

Value Pattern: [^\p{C}]+

Required: No

### stepTimeoutInMinutes

Specifies the amount of time this device has to finish execution of this job. If the job execution status is not set to a terminal state before this timer expires, or before the timer is reset (by calling `UpdateJobExecution`, setting the status to `IN_PROGRESS`, and specifying a new timeout value in field `stepTimeoutInMinutes`) the job execution status will be automatically set to `TIMED_OUT`. Note that setting the step timeout has no effect on the in progress timeout that may have been specified when the job was created (`CreateJob` using field `timeoutConfig`).

Valid values for this parameter range from 1 to 10080 (1 minute to 7 days).

Type: Long

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "execution": {
    "approximateSecondsBeforeTimedOut": number,
    "executionNumber": number,
    "jobDocument": "string",
    "jobId": "string",
    "lastUpdatedAt": number,
    "queuedAt": number,
```

```
  "startedAt": number,
  "status": "string",
  "statusDetails": {
    "string" : "string"
  },
  "thingName": "string",
  "versionNumber": number
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### execution

A JobExecution object.

Type: [JobExecution](#) object

## Errors

### **CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The contents of the request were invalid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateJobExecution

Service: Amazon IoT jobs data

Updates the status of a job execution.

Requires permission to access the [UpdateJobExecution](#) action.

## Request Syntax

```
POST /things/thingName/jobs/jobId HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "executionNumber": number,
  "expectedVersion": number,
  "includeJobDocument": boolean,
  "includeJobExecutionState": boolean,
  "status": "string",
  "statusDetails": {
    "string" : "string"
  },
  "stepTimeoutInMinutes": number
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [jobId](#)

The unique identifier assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: Yes

### [thingName](#)

The name of the thing associated with the device.

Length Constraints: Minimum length of 1. Maximum length of 128.



Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### executionNumber

Optional. A number that identifies a particular job execution on a particular device.

Type: Long

Required: No

### expectedVersion

Optional. The expected current version of the job execution. Each time you update the job execution, its version is incremented. If the version of the job execution stored in Jobs does not match, the update is rejected with a VersionMismatch error, and an ErrorResponse that contains the current job execution status data is returned. (This makes it unnecessary to perform a separate DescribeJobExecution request in order to obtain the job execution status data.)

Type: Long

Required: No

### includeJobDocument

Optional. When set to true, the response contains the job document. The default is false.

Type: Boolean

Required: No

### includeJobExecutionState

Optional. When included and set to true, the response contains the JobExecutionState data. The default is false.

Type: Boolean

Required: No

## status

The new status for the job execution (IN\_PROGRESS, FAILED, SUCCESS, or REJECTED). This must be specified on every update.

Type: String

Valid Values: QUEUED | IN\_PROGRESS | SUCCEEDED | FAILED | TIMED\_OUT | REJECTED | REMOVED | CANCELED

Required: Yes

## statusDetails

Optional. A collection of name/value pairs that describe the status of the job execution. If not specified, the statusDetails are unchanged.

The maximum length of the value in the name/value pair is 1,024 characters.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: [a-zA-Z0-9:\_-]+

Value Length Constraints: Minimum length of 1.

Value Pattern: [^\p{C}]+

Required: No

## stepTimeoutInMinutes

Specifies the amount of time this device has to finish execution of this job. If the job execution status is not set to a terminal state before this timer expires, or before the timer is reset (by again calling UpdateJobExecution, setting the status to IN\_PROGRESS, and specifying a new timeout value in this field) the job execution status will be automatically set to TIMED\_OUT. Note that setting or resetting the step timeout has no effect on the in progress timeout that may have been specified when the job was created (CreateJob using field timeoutConfig).

Valid values for this parameter range from 1 to 10080 (1 minute to 7 days). A value of -1 is also valid and will cancel the current step timer (created by an earlier use of UpdateJobExecutionRequest).

Type: Long

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "executionState": {
    "status": "string",
    "statusDetails": {
      "string" : "string"
    },
    "versionNumber": number
  },
  "jobDocument": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### executionState

A JobExecutionState object.

Type: [JobExecutionState](#) object

### jobDocument

The contents of the Job Documents.

Type: String

Length Constraints: Maximum length of 32768.

## Errors

### CertificateValidationException

The certificate is invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The contents of the request were invalid.

HTTP Status Code: 400

### **InvalidStateTransitionException**

An update attempted to change the job execution to a state that is invalid because of the job execution's current state (for example, an attempt to change a request in state SUCCESS to state IN\_PROGRESS). In this case, the body of the error message also contains the executionState field.

HTTP Status Code: 409

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

## Amazon IoT Core Device Advisor

The following actions are supported by Amazon IoT Core Device Advisor:

- [CreateSuiteDefinition](#)
- [DeleteSuiteDefinition](#)
- [GetEndpoint](#)
- [GetSuiteDefinition](#)
- [GetSuiteRun](#)
- [GetSuiteRunReport](#)
- [ListSuiteDefinitions](#)
- [ListSuiteRuns](#)
- [ListTagsForResource](#)
- [StartSuiteRun](#)
- [StopSuiteRun](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateSuiteDefinition](#)

# CreateSuiteDefinition

Service: Amazon IoT Core Device Advisor

Creates a Device Advisor test suite.

Requires permission to access the [CreateSuiteDefinition](#) action.

## Request Syntax

```
POST /suiteDefinitions HTTP/1.1
Content-type: application/json

{
  "clientToken": "string",
  "suiteDefinitionConfiguration": {
    "devicePermissionRoleArn": "string",
    "devices": [
      {
        "certificateArn": "string",
        "deviceRoleArn": "string",
        "thingArn": "string"
      }
    ],
    "intendedForQualification": boolean,
    "isLongDurationTest": boolean,
    "protocol": "string",
    "rootGroup": "string",
    "suiteDefinitionName": "string"
  },
  "tags": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

## clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[\u0021-\u007E]+$`

Required: No

## suiteDefinitionConfiguration

Creates a Device Advisor test suite with suite definition configuration.

Type: [SuiteDefinitionConfiguration](#) object

Required: Yes

## tags

The tags to be attached to the suite definition.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "createdAt": number,
  "suiteDefinitionArn": "string",
  "suiteDefinitionId": "string",
```

```
"suiteDefinitionName": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [createdAt](#)

The timestamp of when the test suite was created.

Type: Timestamp

### [suiteDefinitionArn](#)

The Amazon Resource Name (ARN) of the test suite.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

### [suiteDefinitionId](#)

The UUID of the test suite created.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

### [suiteDefinitionName](#)

The suite definition name of the test suite. This is a required parameter.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

## Errors

### **InternalServerErrorException**

Sends an Internal Failure exception.



HTTP Status Code: 500

## ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

## DeleteSuiteDefinition

Service: Amazon IoT Core Device Advisor

Deletes a Device Advisor test suite.

Requires permission to access the [DeleteSuiteDefinition](#) action.

### Request Syntax

```
DELETE /suiteDefinitions/suiteDefinitionId HTTP/1.1
```

### URI Request Parameters

The request uses the following URI parameters.

#### suiteDefinitionId

Suite definition ID of the test suite to be deleted.

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: Yes

### Request Body

The request does not have a request body.

### Response Syntax

```
HTTP/1.1 200
```

### Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

### Errors

#### InternalServerErrorException

Sends an Internal Failure exception.

HTTP Status Code: 500

## ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetEndpoint

Service: Amazon IoT Core Device Advisor

Gets information about an Device Advisor endpoint.

## Request Syntax

```
GET /endpoint?  
authenticationMethod=authenticationMethod&certificateArn=certificateArn&deviceRoleArn=deviceRoleArn  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### authenticationMethod

The authentication method used during the device connection.

Valid Values: X509ClientCertificate | SignatureVersion4

### certificateArn

The certificate ARN of the device. This is an optional parameter.

Length Constraints: Minimum length of 20. Maximum length of 2048.

### deviceRoleArn

The device role ARN of the device. This is an optional parameter.

Length Constraints: Minimum length of 20. Maximum length of 2048.

### thingArn

The thing ARN of the device. This is an optional parameter.

Length Constraints: Minimum length of 20. Maximum length of 2048.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "endpoint": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### endpoint

The response of an Device Advisor endpoint.

Type: String

Length Constraints: Minimum length of 45. Maximum length of 75.

## Errors

### InternalServerErrorException

Sends an Internal Failure exception.

HTTP Status Code: 500

### ResourceNotFoundException

Sends a Resource Not Found exception.

HTTP Status Code: 404

### ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetSuiteDefinition

Service: Amazon IoT Core Device Advisor

Gets information about a Device Advisor test suite.

Requires permission to access the [GetSuiteDefinition](#) action.

## Request Syntax

```
GET /suiteDefinitions/suiteDefinitionId?suiteDefinitionVersion=suiteDefinitionVersion
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### suiteDefinitionId

Suite definition ID of the test suite to get.

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: Yes

### suiteDefinitionVersion

Suite definition version of the test suite to get.

Length Constraints: Minimum length of 2. Maximum length of 255.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "createdAt": number,
  "lastModifiedAt": number,
```

```
"latestVersion": "string",
"suiteDefinitionArn": "string",
"suiteDefinitionConfiguration": {
  "devicePermissionRoleArn": "string",
  "devices": [
    {
      "certificateArn": "string",
      "deviceRoleArn": "string",
      "thingArn": "string"
    }
  ],
  "intendedForQualification": boolean,
  "isLongDurationTest": boolean,
  "protocol": "string",
  "rootGroup": "string",
  "suiteDefinitionName": "string"
},
"suiteDefinitionId": "string",
"suiteDefinitionVersion": "string",
"tags": {
  "string" : "string"
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### createdAt

Date (in Unix epoch time) when the suite definition was created.

Type: Timestamp

### lastModifiedAt

Date (in Unix epoch time) when the suite definition was last modified.

Type: Timestamp

### latestVersion

Latest suite definition version of the suite definition.



Type: String

Length Constraints: Minimum length of 2. Maximum length of 255.

### [suiteDefinitionArn](#)

The ARN of the suite definition.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

### [suiteDefinitionConfiguration](#)

Suite configuration of the suite definition.

Type: [SuiteDefinitionConfiguration](#) object

### [suiteDefinitionId](#)

Suite definition ID of the suite definition.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

### [suiteDefinitionVersion](#)

Suite definition version of the suite definition.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 255.

### [tags](#)

Tags attached to the suite definition.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 1. Maximum length of 256.

## Errors

### InternalServerErrorException

Sends an Internal Failure exception.

HTTP Status Code: 500

### ResourceNotFoundException

Sends a Resource Not Found exception.

HTTP Status Code: 404

### ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetSuiteRun

Service: Amazon IoT Core Device Advisor

Gets information about a Device Advisor test suite run.

Requires permission to access the [GetSuiteRun](#) action.

## Request Syntax

```
GET /suiteDefinitions/suiteDefinitionId/suiteRuns/suiteRunId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [suiteDefinitionId](#)

Suite definition ID for the test suite run.

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: Yes

### [suiteRunId](#)

Suite run ID for the test suite run.

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "endTime": number,
  "errorReason": "string",
```

```

    "startTime": number,
    "status": "string",
    "suiteDefinitionId": "string",
    "suiteDefinitionVersion": "string",
    "suiteRunArn": "string",
    "suiteRunConfiguration": {
      "parallelRun": boolean,
      "primaryDevice": {
        "certificateArn": "string",
        "deviceRoleArn": "string",
        "thingArn": "string"
      },
      "selectedTestList": [ "string" ]
    },
    "suiteRunId": "string",
    "tags": {
      "string" : "string"
    },
    "testResult": {
      "groups": [
        {
          "groupId": "string",
          "groupName": "string",
          "tests": [
            {
              "endTime": number,
              "failure": "string",
              "logUrl": "string",
              "startTime": number,
              "status": "string",
              "testCaseDefinitionId": "string",
              "testCaseDefinitionName": "string",
              "testCaseRunId": "string",
              "testScenarios": [
                {
                  "failure": "string",
                  "status": "string",
                  "systemMessage": "string",
                  "testCaseScenarioId": "string",
                  "testCaseScenarioType": "string"
                }
              ],
              "warnings": "string"
            }
          ]
        }
      ]
    }
  }

```

```
    ]
  }
]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### endTime

Date (in Unix epoch time) when the test suite run ended.

Type: Timestamp

### errorReason

Error reason for any test suite run failure.

Type: String

### startTime

Date (in Unix epoch time) when the test suite run started.

Type: Timestamp

### status

Status for the test suite run.

Type: String

Valid Values: PASS | FAIL | CANCELED | PENDING | RUNNING | STOPPING | STOPPED | PASS\_WITH\_WARNINGS | ERROR

### suiteDefinitionId

Suite definition ID for the test suite run.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

### suiteDefinitionVersion

Suite definition version for the test suite run.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 255.

### suiteRunArn

The ARN of the suite run.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

### suiteRunConfiguration

Suite run configuration for the test suite run.

Type: [SuiteRunConfiguration](#) object

### suiteRunId

Suite run ID for the test suite run.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

### tags

The tags attached to the suite run.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 1. Maximum length of 256.

### testResult

Test results for the test suite run.

Type: [TestResult](#) object

## Errors

### InternalServerErrorException

Sends an Internal Failure exception.

HTTP Status Code: 500

### ResourceNotFoundException

Sends a Resource Not Found exception.

HTTP Status Code: 404

### ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# GetSuiteRunReport

Service: Amazon IoT Core Device Advisor

Gets a report download link for a successful Device Advisor qualifying test suite run.

Requires permission to access the [GetSuiteRunReport](#) action.

## Request Syntax

```
GET /suiteDefinitions/suiteDefinitionId/suiteRuns/suiteRunId/report HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [suiteDefinitionId](#)

Suite definition ID of the test suite.

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: Yes

### [suiteRunId](#)

Suite run ID of the test suite run.

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
```



```
"qualificationReportDownloadUrl": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [qualificationReportDownloadUrl](#)

Download URL of the qualification report.

Type: String

## Errors

### InternalServerError

Sends an Internal Failure exception.

HTTP Status Code: 500

### ResourceNotFoundException

Sends a Resource Not Found exception.

HTTP Status Code: 404

### ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)

- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

## ListSuiteDefinitions

Service: Amazon IoT Core Device Advisor

Lists the Device Advisor test suites you have created.

Requires permission to access the [ListSuiteDefinitions](#) action.

### Request Syntax

```
GET /suiteDefinitions?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

### URI Request Parameters

The request uses the following URI parameters.

#### [maxResults](#)

The maximum number of results to return at once.

Valid Range: Minimum value of 1. Maximum value of 50.

#### [nextToken](#)

A token used to get the next set of results.

Length Constraints: Maximum length of 2000.

### Request Body

The request does not have a request body.

### Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "suiteDefinitionInformationList": [
    {
      "createdAt": number,
```

```
    "defaultDevices": [
      {
        "certificateArn": "string",
        "deviceRoleArn": "string",
        "thingArn": "string"
      }
    ],
    "intendedForQualification": boolean,
    "isLongDurationTest": boolean,
    "protocol": "string",
    "suiteDefinitionId": "string",
    "suiteDefinitionName": "string"
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token used to get the next set of results.

Type: String

Length Constraints: Maximum length of 2000.

### suiteDefinitionInformationList

An array of objects that provide summaries of information about the suite definitions in the list.

Type: Array of [SuiteDefinitionInformation](#) objects

## Errors

### InternalServerErrorException

Sends an Internal Failure exception.

HTTP Status Code: 500

## ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListSuiteRuns

Service: Amazon IoT Core Device Advisor

Lists runs of the specified Device Advisor test suite. You can list all runs of the test suite, or the runs of a specific version of the test suite.

Requires permission to access the [ListSuiteRuns](#) action.

## Request Syntax

```
GET /suiteRuns?  
maxResults=maxResults&nextToken=nextToken&suiteDefinitionId=suiteDefinitionId&suiteDefinitionVersion=suiteDefinitionVersion  
HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [maxResults](#)

The maximum number of results to return at once.

Valid Range: Minimum value of 1. Maximum value of 50.

### [nextToken](#)

A token to retrieve the next set of results.

Length Constraints: Maximum length of 2000.

### [suiteDefinitionId](#)

Lists the test suite runs of the specified test suite based on suite definition ID.

Length Constraints: Minimum length of 12. Maximum length of 36.

### [suiteDefinitionVersion](#)

Must be passed along with `suiteDefinitionId`. Lists the test suite runs of the specified test suite based on suite definition version.

Length Constraints: Minimum length of 2. Maximum length of 255.

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "suiteRunsList": [
    {
      "createdAt": number,
      "endAt": number,
      "failed": number,
      "passed": number,
      "startedAt": number,
      "status": "string",
      "suiteDefinitionId": "string",
      "suiteDefinitionName": "string",
      "suiteDefinitionVersion": "string",
      "suiteRunId": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

A token to retrieve the next set of results.

Type: String

Length Constraints: Maximum length of 2000.

### suiteRunsList

An array of objects that provide summaries of information about the suite runs in the list.

Type: Array of [SuiteRunInformation](#) objects

## Errors

### InternalServerErrorException

Sends an Internal Failure exception.

HTTP Status Code: 500

### ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# ListTagsForResource

Service: Amazon IoT Core Device Advisor

Lists the tags attached to an IoT Device Advisor resource.

Requires permission to access the [ListTagsForResource](#) action.

## Request Syntax

```
GET /tags/resourceArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### resourceArn

The resource ARN of the IoT Device Advisor resource. This can be SuiteDefinition ARN or SuiteRun ARN.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "tags": {
    "string" : "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## tags

The tags attached to the IoT Device Advisor resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 1. Maximum length of 256.

## Errors

### InternalServerErrorException

Sends an Internal Failure exception.

HTTP Status Code: 500

### ResourceNotFoundException

Sends a Resource Not Found exception.

HTTP Status Code: 404

### ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)

- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# StartSuiteRun

Service: Amazon IoT Core Device Advisor

Starts a Device Advisor test suite run.

Requires permission to access the [StartSuiteRun](#) action.

## Request Syntax

```
POST /suiteDefinitions/suiteDefinitionId/suiteRuns HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "suiteDefinitionVersion": "string",
  "suiteRunConfiguration": {
    "parallelRun": boolean,
    "primaryDevice": {
      "certificateArn": "string",
      "deviceRoleArn": "string",
      "thingArn": "string"
    },
    "selectedTestList": [ "string" ]
  },
  "tags": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [suiteDefinitionId](#)

Suite definition ID of the test suite.

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### suiteDefinitionVersion

Suite definition version of the test suite.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 255.

Required: No

### suiteRunConfiguration

Suite run configuration.

Type: [SuiteRunConfiguration](#) object

Required: Yes

### tags

The tags to be attached to the suite run.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "createdAt": number,
  "endpoint": "string",
```

```
"suiteRunArn": "string",  
"suiteRunId": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### createdAt

Starts a Device Advisor test suite run based on suite create time.

Type: Timestamp

### endpoint

The response of an Device Advisor test endpoint.

Type: String

Length Constraints: Minimum length of 45. Maximum length of 75.

### suiteRunArn

Amazon Resource Name (ARN) of the started suite run.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

### suiteRunId

Suite Run ID of the started suite run.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

## Errors

### ConflictException

Sends a Conflict Exception.

HTTP Status Code: 400

### **InternalServerErrorException**

Sends an Internal Failure exception.

HTTP Status Code: 500

### **ValidationException**

Sends a validation exception.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# StopSuiteRun

Service: Amazon IoT Core Device Advisor

Stops a Device Advisor test suite run that is currently running.

Requires permission to access the [StopSuiteRun](#) action.

## Request Syntax

```
POST /suiteDefinitions/suiteDefinitionId/suiteRuns/suiteRunId/stop HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### suiteDefinitionId

Suite definition ID of the test suite run to be stopped.

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: Yes

### suiteRunId

Suite run ID of the test suite run to be stopped.

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.



## Errors

### InternalServerErrorException

Sends an Internal Failure exception.

HTTP Status Code: 500

### ResourceNotFoundException

Sends a Resource Not Found exception.

HTTP Status Code: 404

### ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# TagResource

Service: Amazon IoT Core Device Advisor

Adds to and modifies existing tags of an IoT Device Advisor resource.

Requires permission to access the [TagResource](#) action.

## Request Syntax

```
POST /tags/resourceArn HTTP/1.1
Content-type: application/json
```

```
{
  "tags": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [resourceArn](#)

The resource ARN of an IoT Device Advisor resource. This can be SuiteDefinition ARN or SuiteRun ARN.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

### [tags](#)

The tags to be attached to the IoT Device Advisor resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalServerErrorException

Sends an Internal Failure exception.

HTTP Status Code: 500

### ResourceNotFoundException

Sends a Resource Not Found exception.

HTTP Status Code: 404

### ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)

- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UntagResource

Service: Amazon IoT Core Device Advisor

Removes tags from an IoT Device Advisor resource.

Requires permission to access the [UntagResource](#) action.

## Request Syntax

```
DELETE /tags/resourceArn?tagKeys=tagKeys HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### [resourceArn](#)

The resource ARN of an IoT Device Advisor resource. This can be SuiteDefinition ARN or SuiteRun ARN.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

### [tagKeys](#)

List of tag keys to remove from the IoT Device Advisor resource.

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalServerErrorException

Sends an Internal Failure exception.

HTTP Status Code: 500

### ResourceNotFoundException

Sends a Resource Not Found exception.

HTTP Status Code: 404

### ValidationException

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# UpdateSuiteDefinition

Service: Amazon IoT Core Device Advisor

Updates a Device Advisor test suite.

Requires permission to access the [UpdateSuiteDefinition](#) action.

## Request Syntax

```
PATCH /suiteDefinitions/suiteDefinitionId HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "suiteDefinitionConfiguration": {
    "devicePermissionRoleArn": "string",
    "devices": [
      {
        "certificateArn": "string",
        "deviceRoleArn": "string",
        "thingArn": "string"
      }
    ],
    "intendedForQualification": boolean,
    "isLongDurationTest": boolean,
    "protocol": "string",
    "rootGroup": "string",
    "suiteDefinitionName": "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### [suiteDefinitionId](#)

Suite definition ID of the test suite to be updated.

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: Yes



## Request Body

The request accepts the following data in JSON format.

### suiteDefinitionConfiguration

Updates a Device Advisor test suite with suite definition configuration.

Type: [SuiteDefinitionConfiguration](#) object

Required: Yes

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "createdAt": number,
  "lastUpdatedAt": number,
  "suiteDefinitionArn": "string",
  "suiteDefinitionId": "string",
  "suiteDefinitionName": "string",
  "suiteDefinitionVersion": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### createdAt

Timestamp of when the test suite was created.

Type: Timestamp

### lastUpdatedAt

Timestamp of when the test suite was updated.

Type: Timestamp

### suiteDefinitionArn

Amazon Resource Name (ARN) of the updated test suite.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

### suiteDefinitionId

Suite definition ID of the updated test suite.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

### suiteDefinitionName

Updates the suite definition name. This is a required parameter.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

### suiteDefinitionVersion

Suite definition version of the updated test suite.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 255.

## Errors

### **InternalServerErrorException**

Sends an Internal Failure exception.

HTTP Status Code: 500

### **ValidationException**

Sends a validation exception.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

## Amazon IoT Fleet Hub

The following actions are supported by Amazon IoT Fleet Hub:

- [CreateApplication](#)
- [DeleteApplication](#)
- [DescribeApplication](#)
- [ListApplications](#)
- [ListTagsForResource](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateApplication](#)

# CreateApplication

Service: Amazon IoT Fleet Hub

Creates a Fleet Hub for Amazon IoT Device Management web application.

When creating a Fleet Hub application, you must create an organization instance of IAM Identity Center if you don't already have one. The Fleet Hub application you create must also be in the same Amazon Web Services Region of the organization instance of IAM Identity Center. For more information see [Enabling IAM Identity Center](#) and [Organization instances of IAM Identity Center](#).

## Note

Amazon will discontinue the Amazon IoT Device Management Fleet Hub feature on October 18, 2025 and is no longer accepting new customers. Existing Amazon IoT Device Management Fleet Hub customers will be able to use Fleet Hub until October 17, 2025. For more information, [Fleet Hub end-of-life \(EOL\) FAQs](#).

## Request Syntax

```
POST /applications HTTP/1.1
Content-type: application/json

{
  "applicationDescription": "string",
  "applicationName": "string",
  "clientToken": "string",
  "roleArn": "string",
  "tags": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request does not use any URI parameters.

## Request Body

The request accepts the following data in JSON format.

## applicationDescription

An optional description of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `^[ -~]*$`

Required: No

## applicationName

The name of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^[ -~]*$`

Required: Yes

## clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9-_$]+`

Required: No

## roleArn

The ARN of the role that the web application assumes when it interacts with Amazon IoT Core.

### Note

The name of the role must be in the form `AWSIoT FleetHub_ random_string` .

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

Required: Yes

## tags

A set of key/value pairs that you can use to manage the web application resource.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `^([\p{L}\p{Z}\p{N}_ . : / = + \ - @] *)$`

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
  "applicationArn": "string",
  "applicationId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 201 response.

The following data is returned in JSON format by the service.

### applicationArn

The ARN of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

### applicationId

The unique Id of the web application.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# DeleteApplication

Service: Amazon IoT Fleet Hub

Deletes a Fleet Hub for Amazon IoT Device Management web application.

## Note

Amazon will discontinue the Amazon IoT Device Management Fleet Hub feature on October 18, 2025 and is no longer accepting new customers. Existing Amazon IoT Device Management Fleet Hub customers will be able to use Fleet Hub until October 17, 2025. For more information, [Fleet Hub end-of-life \(EOL\) FAQs](#).

## Request Syntax

```
DELETE /applications/applicationId?clientToken=clientToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### applicationId

The unique Id of the web application.

Length Constraints: Fixed length of 36.

Pattern: `^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

### clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9-_$]+`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 204
```

## Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

### ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeApplication

Service: Amazon IoT Fleet Hub

Gets information about a Fleet Hub for Amazon IoT Device Management web application.

## Note

Amazon will discontinue the Amazon IoT Device Management Fleet Hub feature on October 18, 2025 and is no longer accepting new customers. Existing Amazon IoT Device Management Fleet Hub customers will be able to use Fleet Hub until October 17, 2025. For more information, [Fleet Hub end-of-life \(EOL\) FAQs](#).

## Request Syntax

```
GET /applications/applicationId HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### applicationId

The unique Id of the web application.

Length Constraints: Fixed length of 36.

Pattern: `^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200  
Content-type: application/json
```

```
{
  "applicationArn": "string",
  "applicationCreationDate": number,
  "applicationDescription": "string",
  "applicationId": "string",
  "applicationLastUpdateDate": number,
  "applicationName": "string",
  "applicationState": "string",
  "applicationUrl": "string",
  "errorMessage": "string",
  "roleArn": "string",
  "ssoClientId": "string",
  "tags": {
    "string" : "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [applicationArn](#)

The ARN of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

### [applicationCreationDate](#)

The date (in Unix epoch time) when the application was created.

Type: Long

### [applicationDescription](#)

An optional description of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `^[ -~]*$`

### [applicationId](#)

The unique Id of the web application.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

### [applicationLastUpdateDate](#)

The date (in Unix epoch time) when the application was last updated.

Type: Long

### [applicationName](#)

The name of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^[ -~]*$`

### [applicationState](#)

The current state of the web application.

Type: String

Valid Values: CREATING | DELETING | ACTIVE | CREATE\_FAILED | DELETE\_FAILED

### [applicationUrl](#)

The URL of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `^https\:\/\/\S+$`

## errorMessage

A message that explains any failures included in the `applicationState` response field. This message explains failures in the `CreateApplication` and `DeleteApplication` actions.

Type: String

## roleArn

The ARN of the role that the web application assumes when it interacts with Amazon IoT Core.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

## ssoClientId

The Id of the single sign-on client that you use to authenticate and authorize users on the web application.

Type: String

## tags

A set of key/value pairs that you can use to manage the web application resource.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `^([\p{L}\p{Z}\p{N}_ . :/=+\-@]*)$`

Value Length Constraints: Minimum length of 0. Maximum length of 256.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

## InvalidRequestException

The request is not valid.

HTTP Status Code: 400

## ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)



# ListApplications

Service: Amazon IoT Fleet Hub

Gets a list of Fleet Hub for Amazon IoT Device Management web applications for the current account.

## Note

Amazon will discontinue the Amazon IoT Device Management Fleet Hub feature on October 18, 2025 and is no longer accepting new customers. Existing Amazon IoT Device Management Fleet Hub customers will be able to use Fleet Hub until October 17, 2025. For more information, [Fleet Hub end-of-life \(EOL\) FAQs](#).

## Request Syntax

```
GET /applications?nextToken=nextToken HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### nextToken

A token used to get the next set of results.

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `^[A-Za-z0-9+/=]+$`

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200  
Content-type: application/json
```

```
{
  "applicationSummaries": [
    {
      "applicationCreationDate": number,
      "applicationDescription": "string",
      "applicationId": "string",
      "applicationLastUpdateDate": number,
      "applicationName": "string",
      "applicationState": "string",
      "applicationUrl": "string"
    }
  ],
  "nextToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### applicationSummaries

An array of objects that provide summaries of information about the web applications in the list.

Type: Array of [ApplicationSummary](#) objects

### nextToken

A token used to get the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `^[A-Za-z0-9+/=]+$`

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListTagsForResource

Service: Amazon IoT Fleet Hub

Lists the tags for the specified resource.

## Note

Amazon will discontinue the Amazon IoT Device Management Fleet Hub feature on October 18, 2025 and is no longer accepting new customers. Existing Amazon IoT Device Management Fleet Hub customers will be able to use Fleet Hub until October 17, 2025. For more information, [Fleet Hub end-of-life \(EOL\) FAQs](#).

## Request Syntax

```
GET /tags/resourceArn HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### resourceArn

The ARN of the resource.

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "tags": {
    "string" : "string"
  }
}
```

```
}  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### tags

The list of tags assigned to the resource.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern:  $^([\p{L}\p{Z}\p{N}_\cdot :/=+\-@]^\ast)\$$

Value Length Constraints: Minimum length of 0. Maximum length of 256.

## Errors

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# TagResource

Service: Amazon IoT Fleet Hub

Adds to or modifies the tags of the specified resource. Tags are metadata which can be used to manage a resource.

## Note

Amazon will discontinue the Amazon IoT Device Management Fleet Hub feature on October 18, 2025 and is no longer accepting new customers. Existing Amazon IoT Device Management Fleet Hub customers will be able to use Fleet Hub until October 17, 2025. For more information, [Fleet Hub end-of-life \(EOL\) FAQs](#).

## Request Syntax

```
POST /tags/resourceArn HTTP/1.1
Content-type: application/json
```

```
{
  "tags": {
    "string" : "string"
  }
}
```

## URI Request Parameters

The request uses the following URI parameters.

### resourceArn

The ARN of the resource.

Required: Yes

## Request Body

The request accepts the following data in JSON format.

## tags

The new or modified tags for the resource.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern:  $^([\p{L}\p{Z}\p{N}_\p{-}:/=+\p{-}@]^*)\$$

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: Yes

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404



## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UntagResource

Service: Amazon IoT Fleet Hub

Removes the specified tags (metadata) from the resource.

## Note

Amazon will discontinue the Amazon IoT Device Management Fleet Hub feature on October 18, 2025 and is no longer accepting new customers. Existing Amazon IoT Device Management Fleet Hub customers will be able to use Fleet Hub until October 17, 2025. For more information, [Fleet Hub end-of-life \(EOL\) FAQs](#).

## Request Syntax

```
DELETE /tags/resourceArn?tagKeys=tagKeys HTTP/1.1
```

## URI Request Parameters

The request uses the following URI parameters.

### resourceArn

The ARN of the resource.

Required: Yes

### tagKeys

A list of the keys of the tags to be removed from the resource.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern:  $^([\p{L}\p{Z}\p{N}_\cdot :/=+\-@]^\ast)\$$

Required: Yes

## Request Body

The request does not have a request body.

## Response Syntax

```
HTTP/1.1 200
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

### InvalidRequestException

The request is not valid.

HTTP Status Code: 400

### ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)

- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UpdateApplication

Service: Amazon IoT Fleet Hub

Updates information about a Fleet Hub for Amazon IoT Device Management web application.

## Note

Amazon will discontinue the Amazon IoT Device Management Fleet Hub feature on October 18, 2025 and is no longer accepting new customers. Existing Amazon IoT Device Management Fleet Hub customers will be able to use Fleet Hub until October 17, 2025. For more information, [Fleet Hub end-of-life \(EOL\) FAQs](#).

## Request Syntax

```
PATCH /applications/applicationId HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "applicationDescription": "string",
  "applicationName": "string",
  "clientToken": "string"
}
```

## URI Request Parameters

The request uses the following URI parameters.

### applicationId

The unique Id of the web application.

Length Constraints: Fixed length of 36.

Pattern: `^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

## Request Body

The request accepts the following data in JSON format.

## applicationDescription

An optional description of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `^[ -~]*$`

Required: No

## applicationName

The name of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^[ -~]*$`

Required: No

## clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9-_$]+`

Required: No

## Response Syntax

```
HTTP/1.1 202
```

## Response Elements

If the action is successful, the service sends back an HTTP 202 response with an empty HTTP body.

## Errors

### **ConflictException**

The request conflicts with the current state of the resource.

HTTP Status Code: 409

### **InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

### **InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

### **ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

### **ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)

- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

## Amazon IoT Secure Tunneling

The following actions are supported by Amazon IoT Secure Tunneling:

- [CloseTunnel](#)
- [DescribeTunnel](#)
- [ListTagsForResource](#)
- [ListTunnels](#)
- [OpenTunnel](#)
- [RotateTunnelAccessToken](#)
- [TagResource](#)
- [UntagResource](#)



# CloseTunnel

Service: Amazon IoT Secure Tunneling

Closes a tunnel identified by the unique tunnel id. When a `CloseTunnel` request is received, we close the WebSocket connections between the client and proxy server so no data can be transmitted.

Requires permission to access the [CloseTunnel](#) action.

## Request Syntax

```
{
  "delete": boolean,
  "tunnelId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [delete](#)

When set to true, Amazon IoT Secure Tunneling deletes the tunnel data immediately.

Type: Boolean

Required: No

### [tunnelId](#)

The ID of the tunnel to close.

Type: String

Pattern: `[a-zA-Z0-9_\-+=:]{1,128}`

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ResourceNotFoundException

Thrown when an operation is attempted on a resource that does not exist.

HTTP Status Code: 400

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# DescribeTunnel

Service: Amazon IoT Secure Tunneling

Gets information about a tunnel identified by the unique tunnel id.

Requires permission to access the [DescribeTunnel](#) action.

## Request Syntax

```
{  
  "tunnelId": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [tunnelId](#)

The tunnel to describe.

Type: String

Pattern: [a-zA-Z0-9\_\-+=:]{1,128}

Required: Yes

## Response Syntax

```
{  
  "tunnel": {  
    "createdAt": number,  
    "description": "string",  
    "destinationConfig": {  
      "services": [ "string" ],  
      "thingName": "string"  
    },  
    "destinationConnectionState": {
```

```
    "lastUpdatedAt": number,
    "status": "string"
  },
  "lastUpdatedAt": number,
  "sourceConnectionState": {
    "lastUpdatedAt": number,
    "status": "string"
  },
  "status": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "timeoutConfig": {
    "maxLifetimeTimeoutMinutes": number
  },
  "tunnelArn": "string",
  "tunnelId": "string"
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### tunnel

The tunnel being described.

Type: [Tunnel](#) object

## Errors

### ResourceNotFoundException

Thrown when an operation is attempted on a resource that does not exist.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListTagsForResource

Service: Amazon IoT Secure Tunneling

Lists the tags for the specified resource.

## Request Syntax

```
{
  "resourceArn": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### resourceArn

The resource ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

## Response Syntax

```
{
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## tags

The tags for the specified resource.

Type: Array of [Tag](#) objects

Array Members: Minimum number of 1 item. Maximum number of 200 items.

## Errors

### ResourceNotFoundException

Thrown when an operation is attempted on a resource that does not exist.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# ListTunnels

Service: Amazon IoT Secure Tunneling

List all tunnels for an Amazon Web Services account. Tunnels are listed by creation time in descending order, newer tunnels will be listed before older tunnels.

Requires permission to access the [ListTunnels](#) action.

## Request Syntax

```
{
  "maxResults": number,
  "nextToken": "string",
  "thingName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [maxResults](#)

The maximum number of results to return at once.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### [nextToken](#)

To retrieve the next set of results, the nextToken value from a previous response; otherwise null to receive the first set of results.

Type: String

Pattern: [a-zA-Z0-9\_=-]{1,4096}

Required: No



## thingName

The name of the IoT thing associated with the destination device.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

## Response Syntax

```
{
  "nextToken": "string",
  "tunnelSummaries": [
    {
      "createdAt": number,
      "description": "string",
      "lastUpdatedAt": number,
      "status": "string",
      "tunnelArn": "string",
      "tunnelId": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextToken

The token to use to get the next set of results, or null if there are no additional results.

Type: String

Pattern: [a-zA-Z0-9\_=-]{1,4096}

## tunnelSummaries

A short description of the tunnels in an Amazon Web Services account.

Type: Array of [TunnelSummary](#) objects

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# OpenTunnel

Service: Amazon IoT Secure Tunneling

Creates a new tunnel, and returns two client access tokens for clients to use to connect to the Amazon IoT Secure Tunneling proxy server.

Requires permission to access the [OpenTunnel](#) action.

## Request Syntax

```
{
  "description": "string",
  "destinationConfig": {
    "services": [ "string" ],
    "thingName": "string"
  },
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "timeoutConfig": {
    "maxLifetimeTimeoutMinutes": number
  }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### description

A short text description of the tunnel.

Type: String

Pattern: `[^\p{C}]{1,2048}`

Required: No

## [destinationConfig](#)

The destination configuration for the OpenTunnel request.

Type: [DestinationConfig](#) object

Required: No

## [tags](#)

A collection of tag metadata.

Type: Array of [Tag](#) objects

Array Members: Minimum number of 1 item. Maximum number of 200 items.

Required: No

## [timeoutConfig](#)

Timeout configuration for a tunnel.

Type: [TimeoutConfig](#) object

Required: No

## Response Syntax

```
{
  "destinationAccessToken": "string",
  "sourceAccessToken": "string",
  "tunnelArn": "string",
  "tunnelId": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## [destinationAccessToken](#)

The access token the destination local proxy uses to connect to Amazon IoT Secure Tunneling.

Type: String

### sourceAccessToken

The access token the source local proxy uses to connect to Amazon IoT Secure Tunneling.

Type: String

### tunnelArn

The Amazon Resource Name for the tunnel.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

### tunnelId

A unique alpha-numeric tunnel ID.

Type: String

Pattern: `[a-zA-Z0-9_\-+=:]{1,128}`

## Errors

### **LimitExceededException**

Thrown when a tunnel limit is exceeded.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# RotateTunnelAccessToken

Service: Amazon IoT Secure Tunneling

Revokes the current client access token (CAT) and returns new CAT for clients to use when reconnecting to secure tunneling to access the same tunnel.

Requires permission to access the [RotateTunnelAccessToken](#) action.

## Note

Rotating the CAT doesn't extend the tunnel duration. For example, say the tunnel duration is 12 hours and the tunnel has already been open for 4 hours. When you rotate the access tokens, the new tokens that are generated can only be used for the remaining 8 hours.

## Request Syntax

```
{
  "clientMode": "string",
  "destinationConfig": {
    "services": [ "string" ],
    "thingName": "string"
  },
  "tunnelId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [clientMode](#)

The mode of the client that will use the client token, which can be either the source or destination, or both source and destination.

Type: String

Valid Values: SOURCE | DESTINATION | ALL

Required: Yes

### destinationConfig

The destination configuration. You can not use `DestinationConfig` with source `clientMode`.

Type: [DestinationConfig](#) object

Required: No

### tunnelId

The tunnel for which you want to rotate the access tokens.

Type: String

Pattern: `[a-zA-Z0-9_\-+=:]{1,128}`

Required: Yes

## Response Syntax

```
{
  "destinationAccessToken": "string",
  "sourceAccessToken": "string",
  "tunnelArn": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### destinationAccessToken

The client access token that the destination local proxy uses to connect to Amazon IoT Secure Tunneling.

Type: String

### sourceAccessToken

The client access token that the source local proxy uses to connect to Amazon IoT Secure Tunneling.



Type: String

### tunnelArn

The Amazon Resource Name for the tunnel.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

## Errors

### ResourceNotFoundException

Thrown when an operation is attempted on a resource that does not exist.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# TagResource

Service: Amazon IoT Secure Tunneling

A resource tag.

## Request Syntax

```
{
  "resourceArn": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### resourceArn

The ARN of the resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

### tags

The tags for the resource.

Type: Array of [Tag](#) objects

Array Members: Minimum number of 1 item. Maximum number of 200 items.

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ResourceNotFoundException

Thrown when an operation is attempted on a resource that does not exist.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# UntagResource

Service: Amazon IoT Secure Tunneling

Removes a tag from a resource.

## Request Syntax

```
{
  "resourceArn": "string",
  "tagKeys": [ "string" ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### resourceArn

The resource ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

### tagKeys

The keys of the tags to remove.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 200 items.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern:  $^([\p{L}\p{Z}\p{N}_\cdot :/=+\-@]^\ast)\$$

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

### ResourceNotFoundException

Thrown when an operation is attempted on a resource that does not exist.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for JavaScript V3](#)
- [Amazon SDK for Kotlin](#)
- [Amazon SDK for PHP V3](#)
- [Amazon SDK for Python](#)
- [Amazon SDK for Ruby V3](#)

# Data Types

The following data types are supported by Amazon IoT:

- [AbortConfig](#)
- [AbortCriteria](#)
- [Action](#)
- [ActiveViolation](#)
- [AddThingsToThingGroupParams](#)
- [AggregationType](#)
- [AlertTarget](#)
- [Allowed](#)
- [AssetPropertyTimestamp](#)
- [AssetPropertyValue](#)
- [AssetPropertyVariant](#)
- [AttributePayload](#)
- [AuditCheckConfiguration](#)
- [AuditCheckDetails](#)
- [AuditFinding](#)
- [AuditMitigationActionExecutionMetadata](#)
- [AuditMitigationActionsTaskMetadata](#)
- [AuditMitigationActionsTaskTarget](#)
- [AuditNotificationTarget](#)
- [AuditSuppression](#)
- [AuditTaskMetadata](#)
- [AuthInfo](#)
- [AuthorizerConfig](#)
- [AuthorizerDescription](#)
- [AuthorizerSummary](#)
- [AuthResult](#)
- [AwsJobAbortConfig](#)

- [AwsJobAbortCriteria](#)
- [AwsJobExecutionsRolloutConfig](#)
- [AwsJobExponentialRolloutRate](#)
- [AwsJobPresignedUrlConfig](#)
- [AwsJobRateIncreaseCriteria](#)
- [AwsJobTimeoutConfig](#)
- [Behavior](#)
- [BehaviorCriteria](#)
- [BehaviorModelTrainingSummary](#)
- [BillingGroupMetadata](#)
- [BillingGroupProperties](#)
- [Bucket](#)
- [BucketsAggregationType](#)
- [CACertificate](#)
- [CACertificateDescription](#)
- [Certificate](#)
- [CertificateDescription](#)
- [CertificateProviderSummary](#)
- [CertificateValidity](#)
- [ClientCertificateConfig](#)
- [CloudwatchAlarmAction](#)
- [CloudwatchLogsAction](#)
- [CloudwatchMetricAction](#)
- [CodeSigning](#)
- [CodeSigningCertificateChain](#)
- [CodeSigningSignature](#)
- [CommandExecutionResult](#)
- [CommandExecutionSummary](#)
- [CommandParameter](#)
- [CommandParameterValue](#)

- [CommandPayload](#)
- [CommandSummary](#)
- [Configuration](#)
- [CustomCodeSigning](#)
- [Denied](#)
- [Destination](#)
- [DetectMitigationActionExecution](#)
- [DetectMitigationActionsTaskStatistics](#)
- [DetectMitigationActionsTaskSummary](#)
- [DetectMitigationActionsTaskTarget](#)
- [DocumentParameter](#)
- [DomainConfigurationSummary](#)
- [DynamoDBAction](#)
- [DynamoDBv2Action](#)
- [EffectivePolicy](#)
- [ElasticsearchAction](#)
- [EnableIoTLoggingParams](#)
- [ErrorInfo](#)
- [ExplicitDeny](#)
- [ExponentialRolloutRate](#)
- [Field](#)
- [FileLocation](#)
- [FirehoseAction](#)
- [FleetMetricNameAndArn](#)
- [GeoLocationTarget](#)
- [GroupNameAndArn](#)
- [HttpAction](#)
- [HttpActionHeader](#)
- [HttpAuthorization](#)
- [HttpContext](#)



- [HttpUrlDestinationConfiguration](#)
- [HttpUrlDestinationProperties](#)
- [HttpUrlDestinationSummary](#)
- [ImplicitDeny](#)
- [IndexingFilter](#)
- [IotAnalyticsAction](#)
- [IotEventsAction](#)
- [IotSiteWiseAction](#)
- [IssuerCertificateIdentifier](#)
- [Job](#)
- [JobExecution](#)
- [JobExecutionsRetryConfig](#)
- [JobExecutionsRolloutConfig](#)
- [JobExecutionStatusDetails](#)
- [JobExecutionSummary](#)
- [JobExecutionSummaryForJob](#)
- [JobExecutionSummaryForThing](#)
- [JobProcessDetails](#)
- [JobSummary](#)
- [JobTemplateSummary](#)
- [KafkaAction](#)
- [KafkaActionHeader](#)
- [KeyPair](#)
- [KinesisAction](#)
- [LambdaAction](#)
- [LocationAction](#)
- [LocationTimestamp](#)
- [LoggingOptionsPayload](#)
- [LogTarget](#)
- [LogTargetConfiguration](#)

- [MachineLearningDetectionConfig](#)
- [MaintenanceWindow](#)
- [ManagedJobTemplateSummary](#)
- [MetricDatum](#)
- [MetricDimension](#)
- [MetricsExportConfig](#)
- [MetricToRetain](#)
- [MetricValue](#)
- [MitigationAction](#)
- [MitigationActionIdentifier](#)
- [MitigationActionParams](#)
- [Mqtt5Configuration](#)
- [MqttContext](#)
- [MqttHeaders](#)
- [NonCompliantResource](#)
- [OpenSearchAction](#)
- [OTAUpdateFile](#)
- [OTAUpdateInfo](#)
- [OTAUpdateSummary](#)
- [OutgoingCertificate](#)
- [PackageSummary](#)
- [PackageVersionArtifact](#)
- [PackageVersionSummary](#)
- [PercentPair](#)
- [Policy](#)
- [PolicyVersion](#)
- [PolicyVersionIdentifier](#)
- [PresignedUrlConfig](#)
- [PrincipalThingObject](#)
- [PropagatingAttribute](#)

- [ProvisioningHook](#)
- [ProvisioningTemplateSummary](#)
- [ProvisioningTemplateVersionSummary](#)
- [PublishFindingToSnsParams](#)
- [PutAssetPropertyValueEntry](#)
- [PutItemInput](#)
- [RateIncreaseCriteria](#)
- [RegistrationConfig](#)
- [RelatedResource](#)
- [ReplaceDefaultPolicyVersionParams](#)
- [RepublishAction](#)
- [ResourceIdentifier](#)
- [RetryCriteria](#)
- [RoleAliasDescription](#)
- [S3Action](#)
- [S3Destination](#)
- [S3Location](#)
- [SalesforceAction](#)
- [Sbom](#)
- [SbomValidationResultSummary](#)
- [ScheduledAuditMetadata](#)
- [ScheduledJobRollout](#)
- [SchedulingConfig](#)
- [SecurityProfileIdentifier](#)
- [SecurityProfileTarget](#)
- [SecurityProfileTargetMapping](#)
- [ServerCertificateConfig](#)
- [ServerCertificateSummary](#)
- [SigningProfileParameter](#)
- [SigV4Authorization](#)

- [SnsAction](#)
- [SqsAction](#)
- [StartSigningJobParameter](#)
- [StatisticalThreshold](#)
- [Statistics](#)
- [StatusReason](#)
- [StepFunctionsAction](#)
- [Stream](#)
- [StreamFile](#)
- [StreamInfo](#)
- [StreamSummary](#)
- [Tag](#)
- [TaskStatistics](#)
- [TaskStatisticsForAuditCheck](#)
- [TermsAggregation](#)
- [ThingAttribute](#)
- [ThingConnectivity](#)
- [ThingDocument](#)
- [ThingGroupDocument](#)
- [ThingGroupIndexingConfiguration](#)
- [ThingGroupMetadata](#)
- [ThingGroupProperties](#)
- [ThingIndexingConfiguration](#)
- [ThingPrincipalObject](#)
- [ThingTypeDefinition](#)
- [ThingTypeMetadata](#)
- [ThingTypeProperties](#)
- [TimeFilter](#)
- [TimeoutConfig](#)
- [TimestreamAction](#)

- [TimestreamDimension](#)
- [TimestreamTimestamp](#)
- [TlsConfig](#)
- [TlsContext](#)
- [TopicRule](#)
- [TopicRuleDestination](#)
- [TopicRuleDestinationConfiguration](#)
- [TopicRuleDestinationSummary](#)
- [TopicRuleListItem](#)
- [TopicRulePayload](#)
- [TransferData](#)
- [UpdateCACertificateParams](#)
- [UpdateDeviceCertificateParams](#)
- [UserProperty](#)
- [ValidationError](#)
- [VersionUpdateByJobsConfig](#)
- [ViolationEvent](#)
- [ViolationEventAdditionalInfo](#)
- [ViolationEventOccurrenceRange](#)
- [VpcDestinationConfiguration](#)
- [VpcDestinationProperties](#)
- [VpcDestinationSummary](#)

The following data types are supported by Amazon IoT data:

- [RetainedMessageSummary](#)

The following data types are supported by Amazon IoT jobs data:

- [CommandParameterValue](#)
- [JobExecution](#)
- [JobExecutionState](#)

- [JobExecutionSummary](#)

The following data types are supported by Amazon IoT Core Device Advisor:

- [DeviceUnderTest](#)
- [GroupResult](#)
- [SuiteDefinitionConfiguration](#)
- [SuiteDefinitionInformation](#)
- [SuiteRunConfiguration](#)
- [SuiteRunInformation](#)
- [TestCaseRun](#)
- [TestCaseScenario](#)
- [TestResult](#)

The following data types are supported by Amazon IoT Fleet Hub:

- [ApplicationSummary](#)

The following data types are supported by Amazon IoT Secure Tunneling:

- [ConnectionState](#)
- [DestinationConfig](#)
- [Tag](#)
- [TimeoutConfig](#)
- [Tunnel](#)
- [TunnelSummary](#)

## Amazon IoT

The following data types are supported by Amazon IoT:

- [AbortConfig](#)
- [AbortCriteria](#)

- [Action](#)
- [ActiveViolation](#)
- [AddThingsToThingGroupParams](#)
- [AggregationType](#)
- [AlertTarget](#)
- [Allowed](#)
- [AssetPropertyTimestamp](#)
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- [AttributePayload](#)
- [AuditCheckConfiguration](#)
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- [AuditMitigationActionsTaskMetadata](#)
- [AuditMitigationActionsTaskTarget](#)
- [AuditNotificationTarget](#)
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- [AuthInfo](#)
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- [AuthorizerDescription](#)
- [AuthorizerSummary](#)
- [AuthResult](#)
- [AwsJobAbortConfig](#)
- [AwsJobAbortCriteria](#)
- [AwsJobExecutionsRolloutConfig](#)
- [AwsJobExponentialRolloutRate](#)
- [AwsJobPresignedUrlConfig](#)
- [AwsJobRateIncreaseCriteria](#)

- [AwsJobTimeoutConfig](#)
- [Behavior](#)
- [BehaviorCriteria](#)
- [BehaviorModelTrainingSummary](#)
- [BillingGroupMetadata](#)
- [BillingGroupProperties](#)
- [Bucket](#)
- [BucketsAggregationType](#)
- [CACertificate](#)
- [CACertificateDescription](#)
- [Certificate](#)
- [CertificateDescription](#)
- [CertificateProviderSummary](#)
- [CertificateValidity](#)
- [ClientCertificateConfig](#)
- [CloudwatchAlarmAction](#)
- [CloudwatchLogsAction](#)
- [CloudwatchMetricAction](#)
- [CodeSigning](#)
- [CodeSigningCertificateChain](#)
- [CodeSigningSignature](#)
- [CommandExecutionResult](#)
- [CommandExecutionSummary](#)
- [CommandParameter](#)
- [CommandParameterValue](#)
- [CommandPayload](#)
- [CommandSummary](#)
- [Configuration](#)
- [CustomCodeSigning](#)
- [Denied](#)



- [Destination](#)
- [DetectMitigationActionExecution](#)
- [DetectMitigationActionsTaskStatistics](#)
- [DetectMitigationActionsTaskSummary](#)
- [DetectMitigationActionsTaskTarget](#)
- [DocumentParameter](#)
- [DomainConfigurationSummary](#)
- [DynamoDBAction](#)
- [DynamoDBv2Action](#)
- [EffectivePolicy](#)
- [ElasticsearchAction](#)
- [EnableIoTLoggingParams](#)
- [ErrorInfo](#)
- [ExplicitDeny](#)
- [ExponentialRolloutRate](#)
- [Field](#)
- [FileLocation](#)
- [FirehoseAction](#)
- [FleetMetricNameAndArn](#)
- [GeoLocationTarget](#)
- [GroupNameAndArn](#)
- [HttpAction](#)
- [HttpActionHeader](#)
- [HttpAuthorization](#)
- [HttpContext](#)
- [HttpUrlDestinationConfiguration](#)
- [HttpUrlDestinationProperties](#)
- [HttpUrlDestinationSummary](#)
- [ImplicitDeny](#)
- [IndexingFilter](#)

- [lotAnalyticsAction](#)
- [lotEventsAction](#)
- [lotSiteWiseAction](#)
- [IssuerCertificateIdentifier](#)
- [Job](#)
- [JobExecution](#)
- [JobExecutionsRetryConfig](#)
- [JobExecutionsRolloutConfig](#)
- [JobExecutionStatusDetails](#)
- [JobExecutionSummary](#)
- [JobExecutionSummaryForJob](#)
- [JobExecutionSummaryForThing](#)
- [JobProcessDetails](#)
- [JobSummary](#)
- [JobTemplateSummary](#)
- [KafkaAction](#)
- [KafkaActionHeader](#)
- [KeyPair](#)
- [KinesisAction](#)
- [LambdaAction](#)
- [LocationAction](#)
- [LocationTimestamp](#)
- [LoggingOptionsPayload](#)
- [LogTarget](#)
- [LogTargetConfiguration](#)
- [MachineLearningDetectionConfig](#)
- [MaintenanceWindow](#)
- [ManagedJobTemplateSummary](#)
- [MetricDatum](#)
- [MetricDimension](#)

- [MetricsExportConfig](#)
- [MetricToRetain](#)
- [MetricValue](#)
- [MitigationAction](#)
- [MitigationActionIdentifier](#)
- [MitigationActionParams](#)
- [Mqtt5Configuration](#)
- [MqttContext](#)
- [MqttHeaders](#)
- [NonCompliantResource](#)
- [OpenSearchAction](#)
- [OTAUpdateFile](#)
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- [OTAUpdateSummary](#)
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- [PackageSummary](#)
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- [PackageVersionSummary](#)
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- [Policy](#)
- [PolicyVersion](#)
- [PolicyVersionIdentifier](#)
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- [PrincipalThingObject](#)
- [PropagatingAttribute](#)
- [ProvisioningHook](#)
- [ProvisioningTemplateSummary](#)
- [ProvisioningTemplateVersionSummary](#)
- [PublishFindingToSnsParams](#)
- [PutAssetPropertyValueEntry](#)

- [PutItemInput](#)
- [RateIncreaseCriteria](#)
- [RegistrationConfig](#)
- [RelatedResource](#)
- [ReplaceDefaultPolicyVersionParams](#)
- [RepublishAction](#)
- [ResourceIdentifier](#)
- [RetryCriteria](#)
- [RoleAliasDescription](#)
- [S3Action](#)
- [S3Destination](#)
- [S3Location](#)
- [SalesforceAction](#)
- [Sbom](#)
- [SbomValidationResultSummary](#)
- [ScheduledAuditMetadata](#)
- [ScheduledJobRollout](#)
- [SchedulingConfig](#)
- [SecurityProfileIdentifier](#)
- [SecurityProfileTarget](#)
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- [SigningProfileParameter](#)
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- [SnsAction](#)
- [SqsAction](#)
- [StartSigningJobParameter](#)
- [StatisticalThreshold](#)
- [Statistics](#)

- [StatusReason](#)
- [StepFunctionsAction](#)
- [Stream](#)
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- [StreamInfo](#)
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- [Tag](#)
- [TaskStatistics](#)
- [TaskStatisticsForAuditCheck](#)
- [TermsAggregation](#)
- [ThingAttribute](#)
- [ThingConnectivity](#)
- [ThingDocument](#)
- [ThingGroupDocument](#)
- [ThingGroupIndexingConfiguration](#)
- [ThingGroupMetadata](#)
- [ThingGroupProperties](#)
- [ThingIndexingConfiguration](#)
- [ThingPrincipalObject](#)
- [ThingTypeDefinition](#)
- [ThingTypeMetadata](#)
- [ThingTypeProperties](#)
- [TimeFilter](#)
- [TimeoutConfig](#)
- [TimestreamAction](#)
- [TimestreamDimension](#)
- [TimestreamTimestamp](#)
- [TlsConfig](#)
- [TlsContext](#)
- [TopicRule](#)

- [TopicRuleDestination](#)
- [TopicRuleDestinationConfiguration](#)
- [TopicRuleDestinationSummary](#)
- [TopicRuleListItem](#)
- [TopicRulePayload](#)
- [TransferData](#)
- [UpdateCACertificateParams](#)
- [UpdateDeviceCertificateParams](#)
- [UserProperty](#)
- [ValidationError](#)
- [VersionUpdateByJobsConfig](#)
- [ViolationEvent](#)
- [ViolationEventAdditionalInfo](#)
- [ViolationEventOccurrenceRange](#)
- [VpcDestinationConfiguration](#)
- [VpcDestinationProperties](#)
- [VpcDestinationSummary](#)

# AbortConfig

Service: Amazon IoT

The criteria that determine when and how a job abort takes place.

## Contents

### criteriaList

The list of criteria that determine when and how to abort the job.

Type: Array of [AbortCriteria](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AbortCriteria

Service: Amazon IoT

The criteria that determine when and how a job abort takes place.

## Contents

### action

The type of job action to take to initiate the job abort.

Type: String

Valid Values: CANCEL

Required: Yes

### failureType

The type of job execution failures that can initiate a job abort.

Type: String

Valid Values: FAILED | REJECTED | TIMED\_OUT | ALL

Required: Yes

### minNumberOfExecutedThings

The minimum number of things which must receive job execution notifications before the job can be aborted.

Type: Integer

Valid Range: Minimum value of 1.

Required: Yes

### thresholdPercentage

The minimum percentage of job execution failures that must occur to initiate the job abort.

Amazon IoT Core supports up to two digits after the decimal (for example, 10.9 and 10.99, but not 10.999).



Type: Double

Valid Range: Maximum value of 100.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## Action

Service: Amazon IoT

Describes the actions associated with a rule.

### Contents

#### **cloudwatchAlarm**

Change the state of a CloudWatch alarm.

Type: [CloudwatchAlarmAction](#) object

Required: No

#### **cloudwatchLogs**

Send data to CloudWatch Logs.

Type: [CloudwatchLogsAction](#) object

Required: No

#### **cloudwatchMetric**

Capture a CloudWatch metric.

Type: [CloudwatchMetricAction](#) object

Required: No

#### **dynamoDB**

Write to a DynamoDB table.

Type: [DynamoDBAction](#) object

Required: No

#### **dynamoDBv2**

Write to a DynamoDB table. This is a new version of the DynamoDB action. It allows you to write each attribute in an MQTT message payload into a separate DynamoDB column.

Type: [DynamoDBv2Action](#) object

Required: No

## elasticsearch

Write data to an Amazon OpenSearch Service domain.

### Note

The `Elasticsearch` action can only be used by existing rule actions. To create a new rule action or to update an existing rule action, use the `OpenSearch` rule action instead. For more information, see [OpenSearchAction](#).

Type: [ElasticsearchAction](#) object

Required: No

## firehose

Write to an Amazon Kinesis Firehose stream.

Type: [FirehoseAction](#) object

Required: No

## http

Send data to an HTTPS endpoint.

Type: [HttpAction](#) object

Required: No

## iotAnalytics

Sends message data to an Amazon IoT Analytics channel.

Type: [IotAnalyticsAction](#) object

Required: No

## iotEvents

Sends an input to an Amazon IoT Events detector.

Type: [IotEventsAction](#) object

Required: No

### **iotSiteWise**

Sends data from the MQTT message that triggered the rule to Amazon IoT SiteWise asset properties.

Type: [iotSiteWiseAction](#) object

Required: No

### **kafka**

Send messages to an Amazon Managed Streaming for Apache Kafka (Amazon MSK) or self-managed Apache Kafka cluster.

Type: [KafkaAction](#) object

Required: No

### **kinesis**

Write data to an Amazon Kinesis stream.

Type: [KinesisAction](#) object

Required: No

### **lambda**

Invoke a Lambda function.

Type: [LambdaAction](#) object

Required: No

### **location**

The Amazon Location Service rule action sends device location updates from an MQTT message to an Amazon Location tracker resource.

Type: [LocationAction](#) object

Required: No

### **openSearch**

Write data to an Amazon OpenSearch Service domain.

Type: [OpenSearchAction](#) object

Required: No

### **republish**

Publish to another MQTT topic.

Type: [RepublishAction](#) object

Required: No

### **s3**

Write to an Amazon S3 bucket.

Type: [S3Action](#) object

Required: No

### **salesforce**

Send a message to a Salesforce IoT Cloud Input Stream.

Type: [SalesforceAction](#) object

Required: No

### **sns**

Publish to an Amazon SNS topic.

Type: [SnsAction](#) object

Required: No

### **sqs**

Publish to an Amazon SQS queue.

Type: [SqsAction](#) object

Required: No

### **stepFunctions**

Starts execution of a Step Functions state machine.

Type: [StepFunctionsAction](#) object

Required: No

## **timestream**

The Timestream rule action writes attributes (measures) from an MQTT message into an Amazon Timestream table. For more information, see the [Timestream](#) topic rule action documentation.

Type: [TimestreamAction](#) object

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ActiveViolation

Service: Amazon IoT

Information about an active Device Defender security profile behavior violation.

## Contents

### behavior

The behavior that is being violated.

Type: [Behavior](#) object

Required: No

### lastViolationTime

The time the most recent violation occurred.

Type: Timestamp

Required: No

### lastViolationValue

The value of the metric (the measurement) that caused the most recent violation.

Type: [MetricValue](#) object

Required: No

### securityProfileName

The security profile with the behavior is in violation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### thingName

The name of the thing responsible for the active violation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: No

### **verificationState**

The verification state of the violation (detect alarm).

Type: String

Valid Values: FALSE\_POSITIVE | BENIGN\_POSITIVE | TRUE\_POSITIVE | UNKNOWN

Required: No

### **verificationStateDescription**

The description of the verification state of the violation.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: [^\p{Cntrl}]\*

Required: No

### **violationEventAdditionalInfo**

The details of a violation event.

Type: [ViolationEventAdditionalInfo](#) object

Required: No

### **violationId**

The ID of the active violation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\-\-]+

Required: No



## **violationStartTime**

The time the violation started.

Type: Timestamp

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AddThingsToThingGroupParams

Service: Amazon IoT

Parameters used when defining a mitigation action that move a set of things to a thing group.

## Contents

### **thingGroupNames**

The list of groups to which you want to add the things that triggered the mitigation action. You can add a thing to a maximum of 10 groups, but you can't add a thing to more than one group in the same hierarchy.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

### **overrideDynamicGroups**

Specifies if this mitigation action can move the things that triggered the mitigation action even if they are part of one or more dynamic thing groups.

Type: Boolean

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AggregationType

Service: Amazon IoT

The type of aggregation queries.

## Contents

### name

The name of the aggregation type.

Type: String

Valid Values: `Statistics` | `Percentiles` | `Cardinality`

Required: Yes

### values

A list of the values of aggregation types.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 12.

Pattern: `[a-zA-Z0-9]+`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AlertTarget

Service: Amazon IoT

A structure containing the alert target ARN and the role ARN.

## Contents

### alertTargetArn

The Amazon Resource Name (ARN) of the notification target to which alerts are sent.

Type: String

Required: Yes

### roleArn

The ARN of the role that grants permission to send alerts to the notification target.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## Allowed

Service: Amazon IoT

Contains information that allowed the authorization.

## Contents

### policies

A list of policies that allowed the authentication.

Type: Array of [Policy](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AssetPropertyTimestamp

Service: Amazon IoT

An asset property timestamp entry containing the following information.

## Contents

### timeInSeconds

A string that contains the time in seconds since epoch. Accepts substitution templates.

Type: String

Required: Yes

### offsetInNanos

Optional. A string that contains the nanosecond time offset. Accepts substitution templates.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AssetPropertyValue

Service: Amazon IoT

An asset property value entry containing the following information.

## Contents

### timestamp

The asset property value timestamp.

Type: [AssetPropertyTimestamp](#) object

Required: Yes

### value

The value of the asset property.

Type: [AssetPropertyVariant](#) object

Required: Yes

### quality

Optional. A string that describes the quality of the value. Accepts substitution templates. Must be GOOD, BAD, or UNCERTAIN.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AssetPropertyVariant

Service: Amazon IoT

Contains an asset property value (of a single type).

## Contents

### booleanValue

Optional. A string that contains the boolean value (`true` or `false`) of the value entry. Accepts substitution templates.

Type: String

Required: No

### doubleValue

Optional. A string that contains the double value of the value entry. Accepts substitution templates.

Type: String

Required: No

### integerValue

Optional. A string that contains the integer value of the value entry. Accepts substitution templates.

Type: String

Required: No

### stringValue

Optional. The string value of the value entry. Accepts substitution templates.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Required: No



## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AttributePayload

Service: Amazon IoT

The attribute payload.

## Contents

### attributes

A JSON string containing up to three key-value pair in JSON format. For example:

```
{\"attributes\":{\"string1\":\"string2\"}}
```

Type: String to string map

Key Length Constraints: Maximum length of 128.

Key Pattern: [a-zA-Z0-9\_.,@/:#-]+

Value Length Constraints: Maximum length of 800.

Value Pattern: [a-zA-Z0-9\_.,@/:#=[\]-]\*

Required: No

### merge

Specifies whether the list of attributes provided in the `AttributePayload` is merged with the attributes stored in the registry, instead of overwriting them.

To remove an attribute, call `UpdateThing` with an empty attribute value.

#### Note

The `merge` attribute is only valid when calling `UpdateThing` or `UpdateThingGroup`.

Type: Boolean

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AuditCheckConfiguration

Service: Amazon IoT

Which audit checks are enabled and disabled for this account.

## Contents

### configuration

A structure containing the `configName` and corresponding `configValue` for configuring audit checks.

Type: String to string map

Valid Keys: `CERT_AGE_THRESHOLD_IN_DAYS` | `CERT_EXPIRATION_THRESHOLD_IN_DAYS`

Value Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

### enabled

True if this audit check is enabled for this account.

Type: Boolean

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AuditCheckDetails

Service: Amazon IoT

Information about the audit check.

## Contents

### checkCompliant

True if the check is complete and found all resources compliant.

Type: Boolean

Required: No

### checkRunStatus

The completion status of this check. One of "IN\_PROGRESS", "WAITING\_FOR\_DATA\_COLLECTION", "CANCELED", "COMPLETED\_COMPLIANT", "COMPLETED\_NON\_COMPLIANT", or "FAILED".

Type: String

Valid Values: IN\_PROGRESS | WAITING\_FOR\_DATA\_COLLECTION | CANCELED | COMPLETED\_COMPLIANT | COMPLETED\_NON\_COMPLIANT | FAILED

Required: No

### errorCode

The code of any error encountered when this check is performed during this audit. One of "INSUFFICIENT\_PERMISSIONS" or "AUDIT\_CHECK\_DISABLED".

Type: String

Required: No

### message

The message associated with any error encountered when this check is performed during this audit.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

### **nonCompliantResourcesCount**

The number of resources that were found noncompliant during the check.

Type: Long

Required: No

### **suppressedNonCompliantResourcesCount**

Describes how many of the non-compliant resources created during the evaluation of an audit check were marked as suppressed.

Type: Long

Required: No

### **totalResourcesCount**

The number of resources on which the check was performed.

Type: Long

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AuditFinding

Service: Amazon IoT

The findings (results) of the audit.

## Contents

### checkName

The audit check that generated this result.

Type: String

Required: No

### findingId

A unique identifier for this set of audit findings. This identifier is used to apply mitigation tasks to one or more sets of findings.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_- ]+

Required: No

### findingTime

The time the result (finding) was discovered.

Type: Timestamp

Required: No

### isSuppressed

Indicates whether the audit finding was suppressed or not during reporting.

Type: Boolean

Required: No

### nonCompliantResource

The resource that was found to be noncompliant with the audit check.

Type: [NonCompliantResource](#) object

Required: No

### **reasonForNonCompliance**

The reason the resource was noncompliant.

Type: String

Required: No

### **reasonForNonComplianceCode**

A code that indicates the reason that the resource was noncompliant.

Type: String

Required: No

### **relatedResources**

The list of related resources.

Type: Array of [RelatedResource](#) objects

Required: No

### **severity**

The severity of the result (finding).

Type: String

Valid Values: CRITICAL | HIGH | MEDIUM | LOW

Required: No

### **taskId**

The ID of the audit that generated this result (finding).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 40.

Pattern: `[a-zA-Z0-9\-\-]+`



Required: No

### **taskStartTime**

The time the audit started.

Type: Timestamp

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AuditMitigationActionExecutionMetadata

Service: Amazon IoT

Returned by ListAuditMitigationActionsTask, this object contains information that describes a mitigation action that has been started.

## Contents

### actionId

The unique identifier for the mitigation action being applied by the task.

Type: String

Required: No

### actionName

The friendly name of the mitigation action being applied by the task.

Type: String

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### endTime

The date and time when the task was completed or canceled. Blank if the task is still running.

Type: Timestamp

Required: No

### errorCode

If an error occurred, the code that indicates which type of error occurred.

Type: String

Required: No

**findingId**

The unique identifier for the findings to which the task and associated mitigation action are applied.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

**message**

If an error occurred, a message that describes the error.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

**startTime**

The date and time when the task was started.

Type: Timestamp

Required: No

**status**

The current status of the task being executed.

Type: String

Valid Values: IN\_PROGRESS | COMPLETED | FAILED | CANCELED | SKIPPED | PENDING

Required: No

**taskId**

The unique identifier for the task that applies the mitigation action.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AuditMitigationActionsTaskMetadata

Service: Amazon IoT

Information about an audit mitigation actions task that is returned by `ListAuditMitigationActionsTasks`.

## Contents

### **startTime**

The time at which the audit mitigation actions task was started.

Type: Timestamp

Required: No

### **taskId**

The unique identifier for the task.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9_-]+`

Required: No

### **taskStatus**

The current state of the audit mitigation actions task.

Type: String

Valid Values: `IN_PROGRESS` | `COMPLETED` | `FAILED` | `CANCELED`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AuditMitigationActionsTaskTarget

Service: Amazon IoT

Used in MitigationActionParams, this information identifies the target findings to which the mitigation actions are applied. Only one entry appears.

## Contents

### auditCheckToReasonCodeFilter

Specifies a filter in the form of an audit check and set of reason codes that identify the findings from the audit to which the audit mitigation actions task apply.

Type: String to array of strings map

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: No

### auditTaskId

If the task will apply a mitigation action to findings from a specific audit, this value uniquely identifies the audit.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 40.

Pattern: [a-zA-Z0-9\ - ]+

Required: No

### findingIds

If the task will apply a mitigation action to one or more listed findings, this value uniquely identifies those findings.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_ - ]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# AuditNotificationTarget

Service: Amazon IoT

Information about the targets to which audit notifications are sent.

## Contents

### enabled

True if notifications to the target are enabled.

Type: Boolean

Required: No

### roleArn

The ARN of the role that grants permission to send notifications to the target.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### targetArn

The ARN of the target (SNS topic) to which audit notifications are sent.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# AuditSuppression

Service: Amazon IoT

Filters out specific findings of a Device Defender audit.

## Contents

### checkName

An audit check name. Checks must be enabled for your account. (Use `DescribeAccountAuditConfiguration` to see the list of all checks, including those that are enabled or use `UpdateAccountAuditConfiguration` to select which checks are enabled.)

Type: String

Required: Yes

### resourceIdentifier

Information that identifies the noncompliant resource.

Type: [ResourceIdentifier](#) object

Required: Yes

### description

The description of the audit suppression.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: `[\p{Graph}\x20]*`

Required: No

### expirationDate

The expiration date (epoch timestamp in seconds) that you want the suppression to adhere to.

Type: Timestamp

Required: No

## **suppressIndefinitely**

Indicates whether a suppression should exist indefinitely or not.

Type: Boolean

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AuditTaskMetadata

Service: Amazon IoT

The audits that were performed.

## Contents

### taskId

The ID of this audit.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 40.

Pattern: [a-zA-Z0-9\-]+

Required: No

### taskStatus

The status of this audit. One of "IN\_PROGRESS", "COMPLETED", "FAILED", or "CANCELED".

Type: String

Valid Values: IN\_PROGRESS | COMPLETED | FAILED | CANCELED

Required: No

### taskType

The type of this audit. One of "ON\_DEMAND\_AUDIT\_TASK" or "SCHEDULED\_AUDIT\_TASK".

Type: String

Valid Values: ON\_DEMAND\_AUDIT\_TASK | SCHEDULED\_AUDIT\_TASK

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AuthInfo

Service: Amazon IoT

A collection of authorization information.

## Contents

### resources

The resources for which the principal is being authorized to perform the specified action.

Type: Array of strings

Length Constraints: Maximum length of 2048.

Pattern: `[\s\S]*`

Required: Yes

### actionType

The type of action for which the principal is being authorized.

Type: String

Valid Values: PUBLISH | SUBSCRIBE | RECEIVE | CONNECT

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AuthorizerConfig

Service: Amazon IoT

An object that specifies the authorization service for a domain.

## Contents

### **allowAuthorizerOverride**

A Boolean that specifies whether the domain configuration's authorization service can be overridden.

Type: Boolean

Required: No

### **defaultAuthorizerName**

The name of the authorization service for a domain configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# AuthorizerDescription

Service: Amazon IoT

The authorizer description.

## Contents

### **authorizerArn**

The authorizer ARN.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

### **authorizerFunctionArn**

The authorizer's Lambda function ARN.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `[\s\S]*`

Required: No

### **authorizerName**

The authorizer name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=, @- ]+`

Required: No

### **creationDate**

The UNIX timestamp of when the authorizer was created.

Type: Timestamp

Required: No

### **enableCachingForHttp**

When `true`, the result from the authorizer's Lambda function is cached for the time specified in `refreshAfterInSeconds`. The cached result is used while the device reuses the same HTTP connection.

Type: Boolean

Required: No

### **lastModifiedDate**

The UNIX timestamp of when the authorizer was last updated.

Type: Timestamp

Required: No

### **signingDisabled**

Specifies whether Amazon IoT validates the token signature in an authorization request.

Type: Boolean

Required: No

### **status**

The status of the authorizer.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

### **tokenKeyName**

The key used to extract the token from the HTTP headers.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### **tokenSigningPublicKeys**

The public keys used to validate the token signature returned by your custom authentication service.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: [a-zA-Z0-9:\_-]+

Value Length Constraints: Maximum length of 5120.

Value Pattern: [\\s\\S]\*

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AuthorizerSummary

Service: Amazon IoT

The authorizer summary.

## Contents

### authorizerArn

The authorizer ARN.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

### authorizerName

The authorizer name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AuthResult

Service: Amazon IoT

The authorizer result.

## Contents

### allowed

The policies and statements that allowed the specified action.

Type: [Allowed](#) object

Required: No

### authDecision

The final authorization decision of this scenario. Multiple statements are taken into account when determining the authorization decision. An explicit deny statement can override multiple allow statements.

Type: String

Valid Values: ALLOWED | EXPLICIT\_DENY | IMPLICIT\_DENY

Required: No

### authInfo

Authorization information.

Type: [AuthInfo](#) object

Required: No

### denied

The policies and statements that denied the specified action.

Type: [Denied](#) object

Required: No

### missingContextValues

Contains any missing context values found while evaluating policy.

Type: Array of strings

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AwsJobAbortConfig

Service: Amazon IoT

The criteria that determine when and how a job abort takes place.

## Contents

### abortCriteriaList

The list of criteria that determine when and how to abort the job.

Type: Array of [AwsJobAbortCriteria](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AwsJobAbortCriteria

Service: Amazon IoT

The criteria that determine when and how a job abort takes place.

## Contents

### **action**

The type of job action to take to initiate the job abort.

Type: String

Valid Values: CANCEL

Required: Yes

### **failureType**

The type of job execution failures that can initiate a job abort.

Type: String

Valid Values: FAILED | REJECTED | TIMED\_OUT | ALL

Required: Yes

### **minNumberOfExecutedThings**

The minimum number of things which must receive job execution notifications before the job can be aborted.

Type: Integer

Valid Range: Minimum value of 1.

Required: Yes

### **thresholdPercentage**

The minimum percentage of job execution failures that must occur to initiate the job abort.

Amazon IoT Core supports up to two digits after the decimal (for example, 10.9 and 10.99, but not 10.999).



Type: Double

Valid Range: Maximum value of 100.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AwsJobExecutionsRolloutConfig

Service: Amazon IoT

Configuration for the rollout of OTA updates.

## Contents

### exponentialRate

The rate of increase for a job rollout. This parameter allows you to define an exponential rate increase for a job rollout.

Type: [AwsJobExponentialRolloutRate](#) object

Required: No

### maximumPerMinute

The maximum number of OTA update job executions started per minute.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AwsJobExponentialRolloutRate

Service: Amazon IoT

The rate of increase for a job rollout. This parameter allows you to define an exponential rate increase for a job rollout.

## Contents

### baseRatePerMinute

The minimum number of things that will be notified of a pending job, per minute, at the start of the job rollout. This is the initial rate of the rollout.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

### incrementFactor

The rate of increase for a job rollout. The number of things notified is multiplied by this factor.

Type: Double

Required: Yes

### rateIncreaseCriteria

The criteria to initiate the increase in rate of rollout for a job.

Amazon IoT Core supports up to one digit after the decimal (for example, 1.5, but not 1.55).

Type: [AwsJobRateIncreaseCriteria](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AwsJobPresignedUrlConfig

Service: Amazon IoT

Configuration information for pre-signed URLs. Valid when protocols contains HTTP.

## Contents

### expiresInSec

How long (in seconds) pre-signed URLs are valid. Valid values are 60 - 3600, the default value is 1800 seconds. Pre-signed URLs are generated when a request for the job document is received.

Type: Long

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AwsJobRateIncreaseCriteria

Service: Amazon IoT

The criteria to initiate the increase in rate of rollout for a job.

## Contents

### numberOfNotifiedThings

When this number of things have been notified, it will initiate an increase in the rollout rate.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

### numberOfSucceededThings

When this number of things have succeeded in their job execution, it will initiate an increase in the rollout rate.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# AwsJobTimeoutConfig

Service: Amazon IoT

Specifies the amount of time each device has to finish its execution of the job. A timer is started when the job execution status is set to IN\_PROGRESS. If the job execution status is not set to another terminal state before the timer expires, it will be automatically set to TIMED\_OUT.

## Contents

### inProgressTimeoutInMinutes

Specifies the amount of time, in minutes, this device has to finish execution of this job. The timeout interval can be anywhere between 1 minute and 7 days (1 to 10080 minutes). The in progress timer can't be updated and will apply to all job executions for the job. Whenever a job execution remains in the IN\_PROGRESS status for longer than this interval, the job execution will fail and switch to the terminal TIMED\_OUT status.

Type: Long

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# Behavior

Service: Amazon IoT

A Device Defender security profile behavior.

## Contents

### name

The name you've given to the behavior.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

Required: Yes

### criteria

The criteria that determine if a device is behaving normally in regard to the `metric`.

#### Note

In the Amazon IoT console, you can choose to be sent an alert through Amazon SNS when Amazon IoT Device Defender detects that a device is behaving anomalously.

Type: [BehaviorCriteria](#) object

Required: No

### exportMetric

Value indicates exporting metrics related to the behavior when it is true.

Type: Boolean

Required: No

### metric

What is measured by the behavior.



Type: String

Required: No

### **metricDimension**

The dimension for a metric in your behavior. For example, using a `TOPIC_FILTER` dimension, you can narrow down the scope of the metric to only MQTT topics where the name matches the pattern specified in the dimension. This can't be used with custom metrics.

Type: [MetricDimension](#) object

Required: No

### **suppressAlerts**

Suppresses alerts.

Type: Boolean

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# BehaviorCriteria

Service: Amazon IoT

The criteria by which the behavior is determined to be normal.

## Contents

### comparisonOperator

The operator that relates the thing measured (`metric`) to the criteria (containing a `value` or `statisticalThreshold`). Valid operators include:

- `string-list`: `in-set` and `not-in-set`
- `number-list`: `in-set` and `not-in-set`
- `ip-address-list`: `in-cidr-set` and `not-in-cidr-set`
- `number`: `less-than`, `less-than-equals`, `greater-than`, and `greater-than-equals`

Type: String

Valid Values: `less-than` | `less-than-equals` | `greater-than` | `greater-than-equals` | `in-cidr-set` | `not-in-cidr-set` | `in-port-set` | `not-in-port-set` | `in-set` | `not-in-set`

Required: No

### consecutiveDatapointsToAlarm

If a device is in violation of the behavior for the specified number of consecutive datapoints, an alarm occurs. If not specified, the default is 1.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10.

Required: No

### consecutiveDatapointsToClear

If an alarm has occurred and the offending device is no longer in violation of the behavior for the specified number of consecutive datapoints, the alarm is cleared. If not specified, the default is 1.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10.

Required: No

### **durationSeconds**

Use this to specify the time duration over which the behavior is evaluated, for those criteria that have a time dimension (for example, NUM\_MESSAGES\_SENT). For a `statisticalThreshold` metric comparison, measurements from all devices are accumulated over this time duration before being used to calculate percentiles, and later, measurements from an individual device are also accumulated over this time duration before being given a percentile rank. Cannot be used with list-based metric datatypes.

Type: Integer

Required: No

### **mlDetectionConfig**

The configuration of an ML Detect

Type: [MachineLearningDetectionConfig](#) object

Required: No

### **statisticalThreshold**

A statistical ranking (percentile) that indicates a threshold value by which a behavior is determined to be in compliance or in violation of the behavior.

Type: [StatisticalThreshold](#) object

Required: No

### **value**

The value to be compared with the `metric`.

Type: [MetricValue](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# BehaviorModelTrainingSummary

Service: Amazon IoT

The summary of an ML Detect behavior model.

## Contents

### behaviorName

The name of the behavior.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

Required: No

### datapointsCollectionPercentage

The percentage of datapoints collected.

Type: Double

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

### lastModelRefreshDate

The date the model was last refreshed.

Type: Timestamp

Required: No

### modelStatus

The status of the behavior model.

Type: String

Valid Values: PENDING\_BUILD | ACTIVE | EXPIRED

Required: No

### **securityProfileName**

The name of the security profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### **trainingDataCollectionStartDate**

The date a training model started collecting data.

Type: Timestamp

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# BillingGroupMetadata

Service: Amazon IoT

Additional information about the billing group.

## Contents

### creationDate

The date the billing group was created.

Type: Timestamp

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# BillingGroupProperties

Service: Amazon IoT

The properties of a billing group.

## Contents

### billingGroupDescription

The description of the billing group.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[\p{Graph}\x20]*`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



## Bucket

Service: Amazon IoT

A count of documents that meets a specific aggregation criteria.

### Contents

#### count

The number of documents that have the value counted for the particular bucket.

Type: Integer

Required: No

#### keyValue

The value counted for the particular bucket.

Type: String

Required: No

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# BucketsAggregationType

Service: Amazon IoT

The type of bucketed aggregation performed.

## Contents

### termsAggregation

Performs an aggregation that will return a list of buckets. The list of buckets is a ranked list of the number of occurrences of an aggregation field value.

Type: [TermsAggregation](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CACertificate

Service: Amazon IoT

A CA certificate.

## Contents

### certificateArn

The ARN of the CA certificate.

Type: String

Required: No

### certificateId

The ID of the CA certificate.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: No

### creationDate

The date the CA certificate was created.

Type: Timestamp

Required: No

### status

The status of the CA certificate.

The status value REGISTER\_INACTIVE is deprecated and should not be used.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CACertificateDescription

Service: Amazon IoT

Describes a CA certificate.

## Contents

### autoRegistrationStatus

Whether the CA certificate configured for auto registration of device certificates. Valid values are "ENABLE" and "DISABLE"

Type: String

Valid Values: ENABLE | DISABLE

Required: No

### certificateArn

The CA certificate ARN.

Type: String

Required: No

### certificateId

The CA certificate ID.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: No

### certificateMode

The mode of the CA.

All the device certificates that are registered using this CA will be registered in the same mode as the CA. For more information about certificate mode for device certificates, see [certificate mode](#).

Type: String

Valid Values: DEFAULT | SNI\_ONLY

Required: No

### **certificatePem**

The CA certificate data, in PEM format.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65536.

Pattern: `[\s\S]*`

Required: No

### **creationDate**

The date the CA certificate was created.

Type: Timestamp

Required: No

### **customerVersion**

The customer version of the CA certificate.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

### **generationId**

The generation ID of the CA certificate.

Type: String

Required: No

### **lastModifiedDate**

The date the CA certificate was last modified.

Type: Timestamp

Required: No

### **ownedBy**

The owner of the CA certificate.

Type: String

Length Constraints: Fixed length of 12.

Pattern: [0-9]+

Required: No

### **status**

The status of a CA certificate.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

### **validity**

When the CA certificate is valid.

Type: [CertificateValidity](#) object

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# Certificate

Service: Amazon IoT

Information about a certificate.

## Contents

### **certificateArn**

The ARN of the certificate.

Type: String

Required: No

### **certificateId**

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

Type: String

Length Constraints: Fixed length of 64.

Pattern:  $(\text{0x})?[a-fA-F0-9]^+$

Required: No

### **certificateMode**

The mode of the certificate.

**DEFAULT:** A certificate in DEFAULT mode is either generated by Amazon IoT Core or registered with an issuer certificate authority (CA) in DEFAULT mode. Devices with certificates in DEFAULT mode aren't required to send the Server Name Indication (SNI) extension when connecting to Amazon IoT Core. However, to use features such as custom domains and VPC endpoints, we recommend that you use the SNI extension when connecting to Amazon IoT Core.

**SNI\_ONLY:** A certificate in SNI\_ONLY mode is registered without an issuer CA. Devices with certificates in SNI\_ONLY mode must send the SNI extension when connecting to Amazon IoT Core.

Type: String

Valid Values: DEFAULT | SNI\_ONLY



Required: No

### **creationDate**

The date and time the certificate was created.

Type: Timestamp

Required: No

### **status**

The status of the certificate.

The status value REGISTER\_INACTIVE is deprecated and should not be used.

Type: String

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING\_TRANSFER | REGISTER\_INACTIVE | PENDING\_ACTIVATION

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CertificateDescription

Service: Amazon IoT

Describes a certificate.

## Contents

### **caCertificateId**

The certificate ID of the CA certificate used to sign this certificate.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: No

### **certificateArn**

The ARN of the certificate.

Type: String

Required: No

### **certificateId**

The ID of the certificate.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: No

### **certificateMode**

The mode of the certificate.

DEFAULT: A certificate in DEFAULT mode is either generated by Amazon IoT Core or registered with an issuer certificate authority (CA) in DEFAULT mode. Devices with certificates in DEFAULT

mode aren't required to send the Server Name Indication (SNI) extension when connecting to Amazon IoT Core. However, to use features such as custom domains and VPC endpoints, we recommend that you use the SNI extension when connecting to Amazon IoT Core.

**SNI\_ONLY:** A certificate in SNI\_ONLY mode is registered without an issuer CA. Devices with certificates in SNI\_ONLY mode must send the SNI extension when connecting to Amazon IoT Core.

For more information about the value for SNI extension, see [Transport security in Amazon IoT](#).

Type: String

Valid Values: DEFAULT | SNI\_ONLY

Required: No

### **certificatePem**

The certificate data, in PEM format.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65536.

Pattern: `[\s\S]*`

Required: No

### **creationDate**

The date and time the certificate was created.

Type: Timestamp

Required: No

### **customerVersion**

The customer version of the certificate.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

**generationId**

The generation ID of the certificate.

Type: String

Required: No

**lastModifiedDate**

The date and time the certificate was last modified.

Type: Timestamp

Required: No

**ownedBy**

The ID of the Amazon Web Services account that owns the certificate.

Type: String

Length Constraints: Fixed length of 12.

Pattern: [0-9]+

Required: No

**previousOwnedBy**

The ID of the Amazon Web Services account of the previous owner of the certificate.

Type: String

Length Constraints: Fixed length of 12.

Pattern: [0-9]+

Required: No

**status**

The status of the certificate.

Type: String

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING\_TRANSFER | REGISTER\_INACTIVE | PENDING\_ACTIVATION

Required: No

### **transferData**

The transfer data.

Type: [TransferData](#) object

Required: No

### **validity**

When the certificate is valid.

Type: [CertificateValidity](#) object

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CertificateProviderSummary

Service: Amazon IoT

The certificate provider summary.

## Contents

### **certificateProviderArn**

The ARN of the certificate provider.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

### **certificateProviderName**

The name of the certificate provider.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=,@- ]+`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CertificateValidity

Service: Amazon IoT

When the certificate is valid.

## Contents

### **notAfter**

The certificate is not valid after this date.

Type: Timestamp

Required: No

### **notBefore**

The certificate is not valid before this date.

Type: Timestamp

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ClientCertificateConfig

Service: Amazon IoT

An object that specifies the client certificate configuration for a domain.

## Contents

### clientCertificateCallbackArn

The ARN of the Lambda function that Amazon IoT invokes after mutual TLS authentication during the connection.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `[\s\S]*`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# CloudwatchAlarmAction

Service: Amazon IoT

Describes an action that updates a CloudWatch alarm.

## Contents

### alarmName

The CloudWatch alarm name.

Type: String

Required: Yes

### roleArn

The IAM role that allows access to the CloudWatch alarm.

Type: String

Required: Yes

### stateReason

The reason for the alarm change.

Type: String

Required: Yes

### stateValue

The value of the alarm state. Acceptable values are: OK, ALARM, INSUFFICIENT\_DATA.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CloudwatchLogsAction

Service: Amazon IoT

Describes an action that sends data to CloudWatch Logs.

## Contents

### logGroupName

The CloudWatch log group to which the action sends data.

Type: String

Required: Yes

### roleArn

The IAM role that allows access to the CloudWatch log.

Type: String

Required: Yes

### batchMode

Indicates whether batches of log records will be extracted and uploaded into CloudWatch. Values include `true` or `false` (*default*).

Type: Boolean

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CloudwatchMetricAction

Service: Amazon IoT

Describes an action that captures a CloudWatch metric.

## Contents

### metricName

The CloudWatch metric name.

Type: String

Required: Yes

### metricNamespace

The CloudWatch metric namespace name.

Type: String

Required: Yes

### metricUnit

The [metric unit](#) supported by CloudWatch.

Type: String

Required: Yes

### metricValue

The CloudWatch metric value.

Type: String

Required: Yes

### roleArn

The IAM role that allows access to the CloudWatch metric.

Type: String

Required: Yes

## **metricTimestamp**

An optional [Unix timestamp](#).

Type: String

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CodeSigning

Service: Amazon IoT

Describes the method to use when code signing a file.

## Contents

### **awsSignerJobId**

The ID of the `AWSSignerJob` which was created to sign the file.

Type: String

Required: No

### **customCodeSigning**

A custom method for code signing a file.

Type: [CustomCodeSigning](#) object

Required: No

### **startSigningJobParameter**

Describes the code-signing job.

Type: [StartSigningJobParameter](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CodeSigningCertificateChain

Service: Amazon IoT

Describes the certificate chain being used when code signing a file.

## Contents

### certificateName

The name of the certificate.

Type: String

Required: No

### inlineDocument

A base64 encoded binary representation of the code signing certificate chain.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CodeSigningSignature

Service: Amazon IoT

Describes the signature for a file.

## Contents

### inlineDocument

A base64 encoded binary representation of the code signing signature.

Type: Base64-encoded binary data object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# CommandExecutionResult

Service: Amazon IoT

The result value of the command execution. The device can use the result field to share additional details about the execution such as a return value of a remote function call.

## Note

This field is not applicable if you use the `AWS-IoT-FleetWise` namespace.

## Contents

### B

An attribute of type Boolean. For example:

```
"BOOL": true
```

Type: Boolean

Required: No

### BIN

An attribute of type Binary.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1.

Required: No

### S

An attribute of type String. For example:

```
"S": "Hello"
```

Type: String

Length Constraints: Minimum length of 1.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CommandExecutionSummary

Service: Amazon IoT

Summary information about a particular command execution.

## Contents

### **commandArn**

The Amazon Resource Name (ARN) of the command execution.

Type: String

Required: No

### **completedAt**

The date and time at which the command completed executing on the target device.

Type: Timestamp

Required: No

### **createdAt**

The date and time at which the command execution was created for the target device.

Type: Timestamp

Required: No

### **executionId**

The unique identifier of the command execution.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### **startedAt**

The date and time at which the command started executing on the target device.

Type: Timestamp

Required: No

### **status**

The status of the command executions.

Type: String

Valid Values: CREATED | IN\_PROGRESS | SUCCEEDED | FAILED | REJECTED |  
TIMED\_OUT

Required: No

### **targetArn**

The Amazon Resource Name (ARN) of the target device for which the command is being executed.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CommandParameter

Service: Amazon IoT

A map of key-value pairs that describe the command.

## Contents

### name

The name of a specific parameter used in a command and command execution.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 192.

Pattern: `^[. $a-zA-Z0-9_-]+$`

Required: Yes

### defaultValue

The default value used to describe the command. This is the value assumed by the parameter if no other value is assigned to it.

Type: [CommandParameterValue](#) object

Required: No

### description

The description of the command parameter.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]*`

Required: No

### value

The value used to describe the command. When you assign a value to a parameter, it will override any default value that you had already specified.

Type: [CommandParameterValue](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CommandParameterValue

Service: Amazon IoT

The range of possible values that's used to describe a specific command parameter.

## Note

The `commandParameterValue` can only have one of the below fields listed.

## Contents

### B

An attribute of type Boolean. For example:

```
"BOOL": true
```

Type: Boolean

Required: No

### BIN

An attribute of type Binary. For example:

```
"B": "dGhpcyB0ZXh0IGl1zIGJhc2U2NC11bmNvZGVk"
```

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1.

Required: No

### D

An attribute of type Double (Sixty-Four Bits).

Type: Double

Required: No

### I

An attribute of type Integer (Thirty-Two Bits).

Type: Integer

Required: No

## L

An attribute of type Long.

Type: Long

Required: No

## S

An attribute of type String. For example:

```
"S": "Hello"
```

Type: String

Length Constraints: Minimum length of 1.

Required: No

## UL

An attribute of type unsigned long.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20.

Pattern: `^[0-9]*$`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)





# CommandPayload

Service: Amazon IoT

The command payload object that contains the instructions for the device to process.

## Contents

### content

The static payload file for the command.

Type: Base64-encoded binary data object

Required: No

### contentType

The content type that specifies the format type of the payload file. This field must use a type/subtype format, such as `application/json`. For information about various content types, see [Common MIME types](#).

Type: String

Length Constraints: Minimum length of 1.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CommandSummary

Service: Amazon IoT

Summary information about a particular command resource.

## Contents

### **commandArn**

The Amazon Resource Name (ARN) of the command.

Type: String

Required: No

### **commandId**

The unique identifier of the command.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### **createdAt**

The timestamp, when the command was created.

Type: Timestamp

Required: No

### **deprecated**

Indicates whether the command has been deprecated.

Type: Boolean

Required: No

### **displayName**

The display name of the command.

Type: String

Length Constraints: Maximum length of 64.

Pattern: `[\p{C}]*`

Required: No

### **lastUpdatedAt**

The timestamp, when the command was last updated.

Type: Timestamp

Required: No

### **pendingDeletion**

Indicates whether the command is pending deletion.

Type: Boolean

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# Configuration

Service: Amazon IoT

Configuration.

## Contents

### Enabled

True to enable the configuration.

Type: Boolean

Required: No

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# CustomCodeSigning

Service: Amazon IoT

Describes a custom method used to code sign a file.

## Contents

### certificateChain

The certificate chain.

Type: [CodeSigningCertificateChain](#) object

Required: No

### hashAlgorithm

The hash algorithm used to code sign the file. You can use a string as the algorithm name if the target over-the-air (OTA) update devices are able to verify the signature that was generated using the same signature algorithm. For example, FreeRTOS uses SHA256 or SHA1, so you can pass either of them based on which was used for generating the signature.

Type: String

Required: No

### signature

The signature for the file.

Type: [CodeSigningSignature](#) object

Required: No

### signatureAlgorithm

The signature algorithm used to code sign the file. You can use a string as the algorithm name if the target over-the-air (OTA) update devices are able to verify the signature that was generated using the same signature algorithm. For example, FreeRTOS uses ECDSA or RSA, so you can pass either of them based on which was used for generating the signature.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## Denied

Service: Amazon IoT

Contains information that denied the authorization.

### Contents

#### **explicitDeny**

Information that explicitly denies the authorization.

Type: [ExplicitDeny](#) object

Required: No

#### **implicitDeny**

Information that implicitly denies the authorization. When a policy doesn't explicitly deny or allow an action on a resource it is considered an implicit deny.

Type: [ImplicitDeny](#) object

Required: No

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



## Destination

Service: Amazon IoT

Describes the location of the updated firmware.

## Contents

### s3Destination

Describes the location in S3 of the updated firmware.

Type: [S3Destination](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# DetectMitigationActionExecution

Service: Amazon IoT

Describes which mitigation actions should be executed.

## Contents

### **actionName**

The friendly name that uniquely identifies the mitigation action.

Type: String

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### **errorCode**

The error code of a mitigation action.

Type: String

Required: No

### **executionEndDate**

The date a mitigation action ended.

Type: Timestamp

Required: No

### **executionStartDate**

The date a mitigation action was started.

Type: Timestamp

Required: No

### **message**

The message of a mitigation action.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

### **status**

The status of a mitigation action.

Type: String

Valid Values: IN\_PROGRESS | SUCCESSFUL | FAILED | SKIPPED

Required: No

### **taskId**

The unique identifier of the task.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### **thingName**

The name of the thing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: No

### **violationId**

The unique identifier of the violation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\ -]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# DetectMitigationActionsTaskStatistics

Service: Amazon IoT

The statistics of a mitigation action task.

## Contents

### **actionsExecuted**

The actions that were performed.

Type: Long

Required: No

### **actionsFailed**

The actions that failed.

Type: Long

Required: No

### **actionsSkipped**

The actions that were skipped.

Type: Long

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# DetectMitigationActionsTaskSummary

Service: Amazon IoT

The summary of the mitigation action tasks.

## Contents

### actionsDefinition

The definition of the actions.

Type: Array of [MitigationAction](#) objects

Required: No

### onlyActiveViolationsIncluded

Includes only active violations.

Type: Boolean

Required: No

### suppressedAlertsIncluded

Includes suppressed alerts.

Type: Boolean

Required: No

### target

Specifies the ML Detect findings to which the mitigation actions are applied.

Type: [DetectMitigationActionsTaskTarget](#) object

Required: No

### taskEndTime

The date the task ended.

Type: Timestamp

Required: No

**taskId**

The unique identifier of the task.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

**taskStartTime**

The date the task started.

Type: Timestamp

Required: No

**taskStatistics**

The statistics of a mitigation action task.

Type: [DetectMitigationActionsTaskStatistics](#) object

Required: No

**taskStatus**

The status of the task.

Type: String

Valid Values: IN\_PROGRESS | SUCCESSFUL | FAILED | CANCELED

Required: No

**violationEventOccurrenceRange**

Specifies the time period of which violation events occurred between.

Type: [ViolationEventOccurrenceRange](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# DetectMitigationActionsTaskTarget

Service: Amazon IoT

The target of a mitigation action task.

## Contents

### behaviorName

The name of the behavior.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### securityProfileName

The name of the security profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### violationIds

The unique identifiers of the violations.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\ -]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# DocumentParameter

Service: Amazon IoT

A map of key-value pairs containing the patterns that need to be replaced in a managed template job document schema. You can use the description of each key as a guidance to specify the inputs during runtime when creating a job.

## Note

`documentParameters` can only be used when creating jobs from Amazon managed templates. This parameter can't be used with custom job templates or to create jobs from them.

## Contents

### description

Description of the map field containing the patterns that need to be replaced in a managed template job document schema.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: No

### example

An example illustrating a pattern that need to be replaced in a managed template job document schema.

Type: String

Pattern: `[^\p{C}]+`

Required: No

### key

Key of the map field containing the patterns that need to be replaced in a managed template job document schema.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_- ]+

Required: No

### **optional**

Specifies whether a pattern that needs to be replaced in a managed template job document schema is optional or required.

Type: Boolean

Required: No

### **regex**

A regular expression of the patterns that need to be replaced in a managed template job document schema.

Type: String

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# DomainConfigurationSummary

Service: Amazon IoT

The summary of a domain configuration. A domain configuration specifies custom IoT-specific information about a domain. A domain configuration can be associated with an Amazon-managed domain (for example, dbc123defghijk.iot.us-west-2.amazonaws.com), a customer managed domain, or a default endpoint.

- Data
- Jobs
- CredentialProvider

## Contents

### domainConfigurationArn

The ARN of the domain configuration.

Type: String

Required: No

### domainConfigurationName

The name of the domain configuration. This value must be unique to a region.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w. : - ]+`

Required: No

### serviceType

The type of service delivered by the endpoint.

Type: String

Valid Values: DATA | CREDENTIAL\_PROVIDER | JOBS

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# DynamoDBAction

Service: Amazon IoT

Describes an action to write to a DynamoDB table.

The `tableName`, `hashKeyField`, and `rangeKeyField` values must match the values used when you created the table.

The `hashKeyValue` and `rangeKeyValue` fields use a substitution template syntax. These templates provide data at runtime. The syntax is as follows: `${sql-expression}`.

You can specify any valid expression in a WHERE or SELECT clause, including JSON properties, comparisons, calculations, and functions. For example, the following field uses the third level of the topic:

```
"hashKeyValue": "${topic(3)}"
```

The following field uses the timestamp:

```
"rangeKeyValue": "${timestamp()}"
```

## Contents

### hashKeyField

The hash key name.

Type: String

Required: Yes

### hashKeyValue

The hash key value.

Type: String

Required: Yes

### roleArn

The ARN of the IAM role that grants access to the DynamoDB table.

Type: String

Required: Yes

### **tableName**

The name of the DynamoDB table.

Type: String

Required: Yes

### **hashKeyType**

The hash key type. Valid values are "STRING" or "NUMBER"

Type: String

Valid Values: STRING | NUMBER

Required: No

### **operation**

The type of operation to be performed. This follows the substitution template, so it can be `${operation}`, but the substitution must result in one of the following: INSERT, UPDATE, or DELETE.

Type: String

Required: No

### **payloadField**

The action payload. This name can be customized.

Type: String

Required: No

### **rangeKeyField**

The range key name.

Type: String

Required: No



## rangeKeyType

The range key type. Valid values are "STRING" or "NUMBER"

Type: String

Valid Values: STRING | NUMBER

Required: No

## rangeKeyValue

The range key value.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# DynamoDBv2Action

Service: Amazon IoT

Describes an action to write to a DynamoDB table.

This DynamoDB action writes each attribute in the message payload into its own column in the DynamoDB table.

## Contents

### putItem

Specifies the DynamoDB table to which the message data will be written. For example:

```
{ "dynamoDBv2": { "roleArn": "aws:iam:12341251:my-role" "putItem":  
{ "tableName": "my-table" } } }
```

Each attribute in the message payload will be written to a separate column in the DynamoDB database.

Type: [PutItemInput](#) object

Required: Yes

### roleArn

The ARN of the IAM role that grants access to the DynamoDB table.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# EffectivePolicy

Service: Amazon IoT

The policy that has the effect on the authorization results.

## Contents

### policyArn

The policy ARN.

Type: String

Required: No

### policyDocument

The IAM policy document.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 404600.

Pattern: `[\s\S]*`

Required: No

### policyName

The policy name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ElasticsearchAction

Service: Amazon IoT

Describes an action that writes data to an Amazon OpenSearch Service domain.

## Note

The `Elasticsearch` action can only be used by existing rule actions. To create a new rule action or to update an existing rule action, use the `OpenSearch` rule action instead. For more information, see [OpenSearchAction](#).

## Contents

### endpoint

The endpoint of your OpenSearch domain.

Type: String

Pattern: `https?://.*`

Required: Yes

### id

The unique identifier for the document you are storing.

Type: String

Required: Yes

### index

The index where you want to store your data.

Type: String

Required: Yes

### roleArn

The IAM role ARN that has access to OpenSearch.

Type: String

Required: Yes

### **type**

The type of document you are storing.

Type: String

Required: Yes

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# EnableIoTLoggingParams

Service: Amazon IoT

Parameters used when defining a mitigation action that enable Amazon IoT Core logging.

## Contents

### logLevel

Specifies the type of information to be logged.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

Required: Yes

### roleArnForLogging

The Amazon Resource Name (ARN) of the IAM role used for logging.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## ErrorInfo

Service: Amazon IoT

Error information.

### Contents

#### code

The error code.

Type: String

Required: No

#### message

The error message.

Type: String

Required: No

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# ExplicitDeny

Service: Amazon IoT

Information that explicitly denies authorization.

## Contents

### policies

The policies that denied the authorization.

Type: Array of [Policy](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ExponentialRolloutRate

Service: Amazon IoT

Allows you to create an exponential rate of rollout for a job.

## Contents

### baseRatePerMinute

The minimum number of things that will be notified of a pending job, per minute at the start of job rollout. This parameter allows you to define the initial rate of rollout.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

### incrementFactor

The exponential factor to increase the rate of rollout for a job.

Amazon IoT Core supports up to one digit after the decimal (for example, 1.5, but not 1.55).

Type: Double

Valid Range: Minimum value of 1.1. Maximum value of 5.

Required: Yes

### rateIncreaseCriteria

The criteria to initiate the increase in rate of rollout for a job.

Type: [RateIncreaseCriteria](#) object

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## Field

Service: Amazon IoT

Describes the name and data type at a field.

### Contents

#### name

The name of the field.

Type: String

Required: No

#### type

The data type of the field.

Type: String

Valid Values: Number | String | Boolean

Required: No

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# FileLocation

Service: Amazon IoT

The location of the OTA update.

## Contents

### s3Location

The location of the updated firmware in S3.

Type: [S3Location](#) object

Required: No

### stream

The stream that contains the OTA update.

Type: [Stream](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# FirehoseAction

Service: Amazon IoT

Describes an action that writes data to an Amazon Kinesis Firehose stream.

## Contents

### **deliveryStreamName**

The delivery stream name.

Type: String

Required: Yes

### **roleArn**

The IAM role that grants access to the Amazon Kinesis Firehose stream.

Type: String

Required: Yes

### **batchMode**

Whether to deliver the Kinesis Data Firehose stream as a batch by using [PutRecordBatch](#). The default value is `false`.

When `batchMode` is `true` and the rule's SQL statement evaluates to an Array, each Array element forms one record in the [PutRecordBatch](#) request. The resulting array can't have more than 500 records.

Type: Boolean

Required: No

### **separator**

A character separator that will be used to separate records written to the Firehose stream. Valid values are: `'\n'` (newline), `'\t'` (tab), `'\r\n'` (Windows newline), `'\t'` (comma).

Type: String

Pattern: `([\n\t])|(\r\n)|(,)`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# FleetMetricNameAndArn

Service: Amazon IoT

The name and ARN of a fleet metric.

## Contents

### **metricArn**

The fleet metric ARN.

Type: String

Required: No

### **metricName**

The fleet metric name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_\-\.]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# GeoLocationTarget

Service: Amazon IoT

A geolocation target that you select to index. Each geolocation target contains a name and order key-value pair that specifies the geolocation target fields.

## Contents

### name

The name of the geolocation target field. If the target field is part of a named shadow, you must select the named shadow using the namedShadow filter.

Type: String

Required: No

### order

The order of the geolocation target field. This field is optional. The default value is LatLon.

Type: String

Valid Values: LatLon | LonLat

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# GroupNameAndArn

Service: Amazon IoT

The name and ARN of a group.

## Contents

### groupArn

The group ARN.

Type: String

Required: No

### groupName

The group name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# HttpAction

Service: Amazon IoT

Send data to an HTTPS endpoint.

## Contents

### url

The endpoint URL. If substitution templates are used in the URL, you must also specify a `confirmationUrl`. If this is a new destination, a new `TopicRuleDestination` is created if possible.

Type: String

Length Constraints: Maximum length of 2000.

Required: Yes

### auth

The authentication method to use when sending data to an HTTPS endpoint.

Type: [HttpAuthorization](#) object

Required: No

### confirmationUrl

The URL to which Amazon IoT sends a confirmation message. The value of the confirmation URL must be a prefix of the endpoint URL. If you do not specify a confirmation URL Amazon IoT uses the endpoint URL as the confirmation URL. If you use substitution templates in the `confirmationUrl`, you must create and enable topic rule destinations that match each possible value of the substitution template before traffic is allowed to your endpoint URL.

Type: String

Length Constraints: Maximum length of 2000.

Required: No

### headers

The HTTP headers to send with the message data.

Type: Array of [HttpActionHeader](#) objects

Array Members: Minimum number of 0 items. Maximum number of 100 items.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# HttpActionHeader

Service: Amazon IoT

The HTTP action header.

## Contents

### key

The HTTP header key.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

### value

The HTTP header value. Substitution templates are supported.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# HttpAuthorization

Service: Amazon IoT

The authorization method used to send messages.

## Contents

### sigv4

Use Sig V4 authorization. For more information, see [Signature Version 4 Signing Process](#).

Type: [SigV4Authorization](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# HttpContext

Service: Amazon IoT

Specifies the HTTP context to use for the test authorizer request.

## Contents

### headers

The header keys and values in an HTTP authorization request.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 8192.

Key Pattern: `[\s\S]*`

Value Length Constraints: Minimum length of 1. Maximum length of 8192.

Value Pattern: `[\s\S]*`

Required: No

### queryString

The query string keys and values in an HTTP authorization request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[\s\S]*`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for Ruby V3](#)



# HttpRequestDestinationConfiguration

Service: Amazon IoT

HTTP URL destination configuration used by the topic rule's HTTP action.

## Contents

### confirmationUrl

The URL Amazon IoT uses to confirm ownership of or access to the topic rule destination URL.

Type: String

Length Constraints: Maximum length of 2000.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# HttpRequestDestinationProperties

Service: Amazon IoT

HTTP URL destination properties.

## Contents

### confirmationUrl

The URL used to confirm the HTTP topic rule destination URL.

Type: String

Length Constraints: Maximum length of 2000.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# HttpRequestDestinationSummary

Service: Amazon IoT

Information about an HTTP URL destination.

## Contents

### confirmationUrl

The URL used to confirm ownership of or access to the HTTP topic rule destination URL.

Type: String

Length Constraints: Maximum length of 2000.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ImplicitDeny

Service: Amazon IoT

Information that implicitly denies authorization. When policy doesn't explicitly deny or allow an action on a resource it is considered an implicit deny.

## Contents

### policies

Policies that don't contain a matching allow or deny statement for the specified action on the specified resource.

Type: Array of [Policy](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# IndexingFilter

Service: Amazon IoT

Provides additional selections for named shadows and geolocation data.

To add named shadows to your fleet indexing configuration, set `namedShadowIndexingMode` to be ON and specify your shadow names in `namedShadowNames` filter.

To add geolocation data to your fleet indexing configuration:

- If you store geolocation data in a class/unnamed shadow, set `thingIndexingMode` to be `REGISTRY_AND_SHADOW` and specify your geolocation data in `geoLocations` filter.
- If you store geolocation data in a named shadow, set `namedShadowIndexingMode` to be ON, add the shadow name in `namedShadowNames` filter, and specify your geolocation data in `geoLocations` filter. For more information, see [Managing fleet indexing](#).

## Contents

### geoLocations

The list of geolocation targets that you select to index. The default maximum number of geolocation targets for indexing is 1. To increase the limit, see [Amazon IoT Device Management Quotas](#) in the *Amazon General Reference*.

Type: Array of [GeoLocationTarget](#) objects

Required: No

### namedShadowNames

The shadow names that you select to index. The default maximum number of shadow names for indexing is 10. To increase the limit, see [Amazon IoT Device Management Quotas](#) in the *Amazon General Reference*.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [`$a-zA-Z0-9:_-`]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# IoTAnalyticsAction

Service: Amazon IoT

Sends message data to an Amazon IoT Analytics channel.

## Contents

### batchMode

Whether to process the action as a batch. The default value is `false`.

When `batchMode` is `true` and the rule SQL statement evaluates to an Array, each Array element is delivered as a separate message when passed by [BatchPutMessage](#) to the Amazon IoT Analytics channel. The resulting array can't have more than 100 messages.

Type: Boolean

Required: No

### channelArn

(deprecated) The ARN of the IoT Analytics channel to which message data will be sent.

Type: String

Required: No

### channelName

The name of the IoT Analytics channel to which message data will be sent.

Type: String

Required: No

### roleArn

The ARN of the role which has a policy that grants IoT Analytics permission to send message data via IoT Analytics (`iotanalytics:BatchPutMessage`).

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# IoTEventsAction

Service: Amazon IoT

Sends an input to an Amazon IoT Events detector.

## Contents

### inputName

The name of the Amazon IoT Events input.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

### roleArn

The ARN of the role that grants Amazon IoT permission to send an input to an Amazon IoT Events detector. ("Action":"iotevents:BatchPutMessage").

Type: String

Required: Yes

### batchMode

Whether to process the event actions as a batch. The default value is `false`.

When `batchMode` is `true`, you can't specify a `messageId`.

When `batchMode` is `true` and the rule SQL statement evaluates to an Array, each Array element is treated as a separate message when it's sent to Amazon IoT Events by calling [BatchPutMessage](#). The resulting array can't have more than 10 messages.

Type: Boolean

Required: No

### messageId

The ID of the message. The default `messageId` is a new UUID value.

When `batchMode` is `true`, you can't specify a `messageId`--a new UUID value will be assigned.

Assign a value to this property to ensure that only one input (message) with a given messageId will be processed by an Amazon IoT Events detector.

Type: String

Length Constraints: Maximum length of 128.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# lotSiteWiseAction

Service: Amazon IoT

Describes an action to send data from an MQTT message that triggered the rule to Amazon IoT SiteWise asset properties.

## Contents

### putAssetPropertyValueEntries

A list of asset property value entries.

Type: Array of [PutAssetPropertyValueEntry](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

### roleArn

The ARN of the role that grants Amazon IoT permission to send an asset property value to Amazon IoT SiteWise. ("Action": "iotsitewise:BatchPutAssetPropertyValue"). The trust policy can restrict access to specific asset hierarchy paths.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# IssuerCertificateIdentifier

Service: Amazon IoT

The certificate issuer identifier.

## Contents

### issuerCertificateSerialNumber

The issuer certificate serial number.

Type: String

Length Constraints: Maximum length of 20.

Pattern: [a-fA-F0-9: ]+

Required: No

### issuerCertificateSubject

The subject of the issuer certificate.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: [\p{Graph}\x20]\*

Required: No

### issuerId

The issuer ID.

Type: String

Length Constraints: Maximum length of 64.

Pattern: (0x)?[a-fA-F0-9 ]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## Job

Service: Amazon IoT

The Job object contains details about a job.

### Contents

#### **abortConfig**

Configuration for criteria to abort the job.

Type: [AbortConfig](#) object

Required: No

#### **comment**

If the job was updated, describes the reason for the update.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: No

#### **completedAt**

The time, in seconds since the epoch, when the job was completed.

Type: Timestamp

Required: No

#### **createdAt**

The time, in seconds since the epoch, when the job was created.

Type: Timestamp

Required: No

#### **description**

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: No

### **destinationPackageVersions**

The package version Amazon Resource Names (ARNs) that are installed on the device when the job successfully completes. The package version must be in either the Published or Deprecated state when the job deploys. For more information, see [Package version lifecycle](#). The package version must be in either the Published or Deprecated state when the job deploys. For more information, see [Package version lifecycle](#).

**Note:** The following Length Constraints relates to a single ARN. Up to 25 package version ARNs are allowed.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

Required: No

### **documentParameters**

A key-value map that pairs the patterns that need to be replaced in a managed template job document schema. You can use the description of each key as a guidance to specify the inputs during runtime when creating a job.

#### **Note**

`documentParameters` can only be used when creating jobs from Amazon managed templates. This parameter can't be used with custom job templates or to create jobs from them.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `[a-zA-Z0-9_-]+`

Value Length Constraints: Minimum length of 1. Maximum length of 30720.

Value Pattern: `[^\p{C}]+`

Required: No

### **forceCanceled**

Will be `true` if the job was canceled with the optional `force` parameter set to `true`.

Type: Boolean

Required: No

### **isConcurrent**

Indicates whether a job is concurrent. Will be `true` when a job is rolling out new job executions or canceling previously created executions, otherwise `false`.

Type: Boolean

Required: No

### **jobArn**

An ARN identifying the job with format `"arn:aws:iot:region:account:job/jobId"`.

Type: String

Required: No

### **jobExecutionsRetryConfig**

The configuration for the criteria to retry the job.

Type: [JobExecutionsRetryConfig](#) object

Required: No

### **jobExecutionsRolloutConfig**

Allows you to create a staged rollout of a job.

Type: [JobExecutionsRolloutConfig](#) object



Required: No

### **jobId**

The unique identifier you assigned to this job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### **jobProcessDetails**

Details about the job process.

Type: [JobProcessDetails](#) object

Required: No

### **jobTemplateArn**

The ARN of the job template used to create the job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: ^arn:[!-~]+\$

Required: No

### **lastUpdatedAt**

The time, in seconds since the epoch, when the job was last updated.

Type: Timestamp

Required: No

### **namespaceId**

The namespace used to indicate that a job is a customer-managed job.

When you specify a value for this parameter, Amazon IoT Core sends jobs notifications to MQTT topics that contain the value in the following format.

`$aws/things/THING_NAME/jobs/JOB_ID/notify-namespace-NAMESPACE_ID/`

**Note**

The namespaceId feature is only supported by Amazon IoT Greengrass at this time. For more information, see [Setting up Amazon IoT Greengrass core devices](#).

Type: String

Pattern: `[a-zA-Z0-9_-]+`

Required: No

### **presignedUrlConfig**

Configuration for pre-signed S3 URLs.

Type: [PresignedUrlConfig](#) object

Required: No

### **reasonCode**

If the job was updated, provides the reason code for the update.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\p{Upper}\p{Digit}]_+`

Required: No

### **scheduledJobRollouts**

Displays the next seven maintenance window occurrences and their start times.

Type: Array of [ScheduledJobRollout](#) objects

Required: No

### **schedulingConfig**

The configuration that allows you to schedule a job for a future date and time in addition to specifying the end behavior for each job execution.

Type: [SchedulingConfig](#) object

Required: No

### status

The status of the job, one of IN\_PROGRESS, CANCELED, DELETION\_IN\_PROGRESS or COMPLETED.

Type: String

Valid Values: IN\_PROGRESS | CANCELED | COMPLETED | DELETION\_IN\_PROGRESS | SCHEDULED

Required: No

### targets

A list of IoT things and thing groups to which the job should be sent.

Type: Array of strings

Array Members: Minimum number of 1 item.

Length Constraints: Maximum length of 2048.

Required: No

### targetSelection

Specifies whether the job will continue to run (CONTINUOUS), or will be complete after all those things specified as targets have completed the job (SNAPSHOT). If continuous, the job may also be run on a thing when a change is detected in a target. For example, a job will run on a device when the thing representing the device is added to a target group, even after the job was completed by all things originally in the group.

#### Note

We recommend that you use continuous jobs instead of snapshot jobs for dynamic thing group targets. By using continuous jobs, devices that join the group receive the job execution even after the job has been created.

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

Required: No

### **timeoutConfig**

Specifies the amount of time each device has to finish its execution of the job. A timer is started when the job execution status is set to IN\_PROGRESS. If the job execution status is not set to another terminal state before the timer expires, it will be automatically set to TIMED\_OUT.

Type: [TimeoutConfig](#) object

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# JobExecution

Service: Amazon IoT

The job execution object represents the execution of a job on a particular device.

## Contents

### **approximateSecondsBeforeTimedOut**

The estimated number of seconds that remain before the job execution status will be changed to TIMED\_OUT. The timeout interval can be anywhere between 1 minute and 7 days (1 to 10080 minutes). The actual job execution timeout can occur up to 60 seconds later than the estimated duration. This value will not be included if the job execution has reached a terminal status.

Type: Long

Required: No

### **executionNumber**

A string (consisting of the digits "0" through "9") which identifies this particular job execution on this particular device. It can be used in commands which return or update job execution information.

Type: Long

Required: No

### **forceCanceled**

Will be true if the job execution was canceled with the optional force parameter set to true.

Type: Boolean

Required: No

### **jobId**

The unique identifier you assigned to the job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_- ]+

Required: No

### **lastUpdatedAt**

The time, in seconds since the epoch, when the job execution was last updated.

Type: Timestamp

Required: No

### **queuedAt**

The time, in seconds since the epoch, when the job execution was queued.

Type: Timestamp

Required: No

### **startedAt**

The time, in seconds since the epoch, when the job execution started.

Type: Timestamp

Required: No

### **status**

The status of the job execution (IN\_PROGRESS, QUEUED, FAILED, SUCCEEDED, TIMED\_OUT, CANCELED, or REJECTED).

Type: String

Valid Values: QUEUED | IN\_PROGRESS | SUCCEEDED | FAILED | TIMED\_OUT | REJECTED | REMOVED | CANCELED

Required: No

### **statusDetails**

A collection of name/value pairs that describe the status of the job execution.

Type: [JobExecutionStatusDetails](#) object

Required: No

## thingArn

The ARN of the thing on which the job execution is running.

Type: String

Required: No

## versionNumber

The version of the job execution. Job execution versions are incremented each time they are updated by a device.

Type: Long

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# JobExecutionsRetryConfig

Service: Amazon IoT

The configuration that determines how many retries are allowed for each failure type for a job.

## Contents

### criteriaList

The list of criteria that determines how many retries are allowed for each failure type for a job.

Type: Array of [RetryCriteria](#) objects

Array Members: Minimum number of 1 item. Maximum number of 2 items.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# JobExecutionsRolloutConfig

Service: Amazon IoT

Allows you to create a staged rollout of a job.

## Contents

### exponentialRate

The rate of increase for a job rollout. This parameter allows you to define an exponential rate for a job rollout.

Type: [ExponentialRolloutRate](#) object

Required: No

### maximumPerMinute

The maximum number of things that will be notified of a pending job, per minute. This parameter allows you to create a staged rollout.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# JobExecutionStatusDetails

Service: Amazon IoT

Details of the job execution status.

## Contents

### detailsMap

The job execution status.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: `[a-zA-Z0-9:_-]+`

Value Length Constraints: Minimum length of 1.

Value Pattern: `[^\p{C}]+`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# JobExecutionSummary

Service: Amazon IoT

The job execution summary.

## Contents

### **executionNumber**

A string (consisting of the digits "0" through "9") which identifies this particular job execution on this particular device. It can be used later in commands which return or update job execution information.

Type: Long

Required: No

### **lastUpdatedAt**

The time, in seconds since the epoch, when the job execution was last updated.

Type: Timestamp

Required: No

### **queuedAt**

The time, in seconds since the epoch, when the job execution was queued.

Type: Timestamp

Required: No

### **retryAttempt**

The number that indicates how many retry attempts have been completed for this job on this device.

Type: Integer

Required: No

### **startedAt**

The time, in seconds since the epoch, when the job execution started.

Type: Timestamp

Required: No

### **status**

The status of the job execution.

Type: String

Valid Values: QUEUED | IN\_PROGRESS | SUCCEEDED | FAILED | TIMED\_OUT | REJECTED | REMOVED | CANCELED

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# JobExecutionSummaryForJob

Service: Amazon IoT

Contains a summary of information about job executions for a specific job.

## Contents

### jobExecutionSummary

Contains a subset of information about a job execution.

Type: [JobExecutionSummary](#) object

Required: No

### thingArn

The ARN of the thing on which the job execution is running.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# JobExecutionSummaryForThing

Service: Amazon IoT

The job execution summary for a thing.

## Contents

### jobExecutionSummary

Contains a subset of information about a job execution.

Type: [JobExecutionSummary](#) object

Required: No

### jobId

The unique identifier you assigned to this job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_- ]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## JobProcessDetails

Service: Amazon IoT

The job process details.

### Contents

#### **numberOfCanceledThings**

The number of things that cancelled the job.

Type: Integer

Required: No

#### **numberOfFailedThings**

The number of things that failed executing the job.

Type: Integer

Required: No

#### **numberOfInProgressThings**

The number of things currently executing the job.

Type: Integer

Required: No

#### **numberOfQueuedThings**

The number of things that are awaiting execution of the job.

Type: Integer

Required: No

#### **numberOfRejectedThings**

The number of things that rejected the job.

Type: Integer

Required: No

### **numberOfRemovedThings**

The number of things that are no longer scheduled to execute the job because they have been deleted or have been removed from the group that was a target of the job.

Type: Integer

Required: No

### **numberOfSucceededThings**

The number of things which successfully completed the job.

Type: Integer

Required: No

### **numberOfTimedOutThings**

The number of things whose job execution status is TIMED\_OUT.

Type: Integer

Required: No

### **processingTargets**

The target devices to which the job execution is being rolled out. This value will be null after the job execution has finished rolling out to all the target devices.

Type: Array of strings

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



## JobSummary

Service: Amazon IoT

The job summary.

### Contents

#### **completedAt**

The time, in seconds since the epoch, when the job completed.

Type: Timestamp

Required: No

#### **createdAt**

The time, in seconds since the epoch, when the job was created.

Type: Timestamp

Required: No

#### **isConcurrent**

Indicates whether a job is concurrent. Will be true when a job is rolling out new job executions or canceling previously created executions, otherwise false.

Type: Boolean

Required: No

#### **jobArn**

The job ARN.

Type: String

Required: No

#### **jobId**

The unique identifier you assigned to this job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_- ]+

Required: No

### **lastUpdatedAt**

The time, in seconds since the epoch, when the job was last updated.

Type: Timestamp

Required: No

### **status**

The job summary status.

Type: String

Valid Values: IN\_PROGRESS | CANCELED | COMPLETED | DELETION\_IN\_PROGRESS | SCHEDULED

Required: No

### **targetSelection**

Specifies whether the job will continue to run (CONTINUOUS), or will be complete after all those things specified as targets have completed the job (SNAPSHOT). If continuous, the job may also be run on a thing when a change is detected in a target. For example, a job will run on a thing when the thing is added to a target group, even after the job was completed by all things originally in the group.

#### **Note**

We recommend that you use continuous jobs instead of snapshot jobs for dynamic thing group targets. By using continuous jobs, devices that join the group receive the job execution even after the job has been created.

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

Required: No

### **thingGroupId**

The ID of the thing group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\-\-]+

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# JobTemplateSummary

Service: Amazon IoT

An object that contains information about the job template.

## Contents

### **createdAt**

The time, in seconds since the epoch, when the job template was created.

Type: Timestamp

Required: No

### **description**

A description of the job template.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: No

### **jobTemplateArn**

The ARN of the job template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

Required: No

### **jobTemplateId**

The unique identifier of the job template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# KafkaAction

Service: Amazon IoT

Send messages to an Amazon Managed Streaming for Apache Kafka (Amazon MSK) or self-managed Apache Kafka cluster.

## Contents

### clientProperties

Properties of the Apache Kafka producer client.

Type: String to string map

Required: Yes

### destinationArn

The ARN of Kafka action's VPC TopicRuleDestination.

Type: String

Required: Yes

### topic

The Kafka topic for messages to be sent to the Kafka broker.

Type: String

Required: Yes

### headers

The list of Kafka headers that you specify.

Type: Array of [KafkaActionHeader](#) objects

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Required: No

### key

The Kafka message key.

Type: String

Required: No

### **partition**

The Kafka message partition.

Type: String

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# KafkaActionHeader

Service: Amazon IoT

Specifies a Kafka header using key-value pairs when you create a Rule's Kafka Action. You can use these headers to route data from IoT clients to downstream Kafka clusters without modifying your message payload.

For more information about Rule's Kafka action, see [Apache Kafka](#).

## Contents

### key

The key of the Kafka header.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16384.

Required: Yes

### value

The value of the Kafka header.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16384.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# KeyPair

Service: Amazon IoT

Describes a key pair.

## Contents

### PrivateKey

The private key.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### PublicKey

The public key.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# KinesisAction

Service: Amazon IoT

Describes an action to write data to an Amazon Kinesis stream.

## Contents

### roleArn

The ARN of the IAM role that grants access to the Amazon Kinesis stream.

Type: String

Required: Yes

### streamName

The name of the Amazon Kinesis stream.

Type: String

Required: Yes

### partitionKey

The partition key.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# LambdaAction

Service: Amazon IoT

Describes an action to invoke a Lambda function.

## Contents

### functionArn

The ARN of the Lambda function.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# LocationAction

Service: Amazon IoT

The Amazon Location rule action sends device location updates from an MQTT message to an Amazon Location tracker resource.

## Note

This API isn't available in China.

## Contents

### **deviceId**

The unique ID of the device providing the location data.

Type: String

Required: Yes

### **latitude**

A string that evaluates to a double value that represents the latitude of the device's location.

Type: String

Required: Yes

### **longitude**

A string that evaluates to a double value that represents the longitude of the device's location.

Type: String

Required: Yes

### **roleArn**

The IAM role that grants permission to write to the Amazon Location resource.

Type: String

Required: Yes

**trackerName**

The name of the tracker resource in Amazon Location in which the location is updated.

Type: String

Required: Yes

**timestamp**

The time that the location data was sampled. The default value is the time the MQTT message was processed.

Type: [LocationTimestamp](#) object

Required: No

**See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# LocationTimestamp

Service: Amazon IoT

Describes how to interpret an application-defined timestamp value from an MQTT message payload and the precision of that value.

## Contents

### value

An expression that returns a long epoch time value.

Type: String

Required: Yes

### unit

The precision of the timestamp value that results from the expression described in `value`.

Valid values: SECONDS | MILLISECONDS | MICROSECONDS | NANOSECONDS. The default is MILLISECONDS.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# LoggingOptionsPayload

Service: Amazon IoT

Describes the logging options payload.

## Contents

### roleArn

The ARN of the IAM role that grants access.

Type: String

Required: Yes

### logLevel

The log level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# LogTarget

Service: Amazon IoT

A log target.

## Contents

### targetType

The target type.

Type: String

Valid Values: DEFAULT | THING\_GROUP | CLIENT\_ID | SOURCE\_IP | PRINCIPAL\_ID

Required: Yes

### targetName

The target name.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# LogTargetConfiguration

Service: Amazon IoT

The target configuration.

## Contents

### logLevel

The logging level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

Required: No

### logTarget

A log target

Type: [LogTarget](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# MachineLearningDetectionConfig

Service: Amazon IoT

The configuration of an ML Detect Security Profile.

## Contents

### confidenceLevel

The sensitivity of anomalous behavior evaluation. Can be Low, Medium, or High.

Type: String

Valid Values: LOW | MEDIUM | HIGH

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# MaintenanceWindow

Service: Amazon IoT

An optional configuration within the `SchedulingConfig` to setup a recurring maintenance window with a predetermined start time and duration for the rollout of a job document to all devices in a target group for a job.

## Contents

### `durationInMinutes`

Displays the duration of the next maintenance window.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1430.

Required: Yes

### `startTime`

Displays the start time of the next maintenance window.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ManagedJobTemplateSummary

Service: Amazon IoT

An object that contains information about the managed template.

## Contents

### description

The description for a managed template.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: No

### environments

A list of environments that are supported with the managed job template.

Type: Array of strings

Pattern: `[^\p{C}]+`

Required: No

### templateArn

The Amazon Resource Name (ARN) for a managed template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:[!-~]+$`

Required: No

### templateName

The unique Name for a managed template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

### **templateVersion**

The version for a managed template.

Type: String

Pattern: `^[1-9]+.[0-9]+`

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# MetricDatum

Service: Amazon IoT

A metric.

## Contents

### timestamp

The time the metric value was reported.

Type: Timestamp

Required: No

### value

The value reported for the metric.

Type: [MetricValue](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# MetricDimension

Service: Amazon IoT

The dimension of a metric.

## Contents

### dimensionName

A unique identifier for the dimension.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: Yes

### operator

Defines how the `dimensionValues` of a dimension are interpreted. For example, for dimension type `TOPIC_FILTER`, the `IN` operator, a message will be counted only if its topic matches one of the topic filters. With `NOT_IN` operator, a message will be counted only if it doesn't match any of the topic filters. The operator is optional: if it's not provided (is `null`), it will be interpreted as `IN`.

Type: String

Valid Values: `IN` | `NOT_IN`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)





# MetricsExportConfig

Service: Amazon IoT

Set configurations for metrics export.

## Contents

### mqttTopic

The MQTT topic that Device Defender Detect should publish messages to for metrics export.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: Yes

### roleArn

This role ARN has permission to publish MQTT messages, after which Device Defender Detect can assume the role and publish messages on your behalf.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# MetricToRetain

Service: Amazon IoT

The metric you want to retain. Dimensions are optional.

## Contents

### metric

What is measured by the behavior.

Type: String

Required: Yes

### exportMetric

The value indicates exporting metrics related to the `MetricToRetain` when it's true.

Type: Boolean

Required: No

### metricDimension

The dimension of a metric. This can't be used with custom metrics.

Type: [MetricDimension](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# MetricValue

Service: Amazon IoT

The value to be compared with the `metric`.

## Contents

### `cidrs`

If the `comparisonOperator` calls for a set of CIDRs, use this to specify that set to be compared with the `metric`.

Type: Array of strings

Length Constraints: Minimum length of 2. Maximum length of 43.

Pattern: `[a-zA-Z0-9:\.\|/]+`

Required: No

### `count`

If the `comparisonOperator` calls for a numeric value, use this to specify that numeric value to be compared with the `metric`.

Type: Long

Valid Range: Minimum value of 0.

Required: No

### `number`

The numeral value of a metric.

Type: Double

Required: No

### `numbers`

The numeral values of a metric.

Type: Array of doubles

Required: No

### **ports**

If the `comparisonOperator` calls for a set of ports, use this to specify that set to be compared with the `metric`.

Type: Array of integers

Valid Range: Minimum value of 0. Maximum value of 65535.

Required: No

### **strings**

The string values of a metric.

Type: Array of strings

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# MitigationAction

Service: Amazon IoT

Describes which changes should be applied as part of a mitigation action.

## Contents

### actionParams

The set of parameters for this mitigation action. The parameters vary, depending on the kind of action you apply.

Type: [MitigationActionParams](#) object

Required: No

### id

A unique identifier for the mitigation action.

Type: String

Required: No

### name

A user-friendly name for the mitigation action.

Type: String

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9\_- ]+

Required: No

### roleArn

The IAM role ARN used to apply this mitigation action.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# MitigationActionIdentifier

Service: Amazon IoT

Information that identifies a mitigation action. This information is returned by `ListMitigationActions`.

## Contents

### **actionArn**

The IAM role ARN used to apply this mitigation action.

Type: String

Required: No

### **actionName**

The friendly name of the mitigation action.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[a-zA-Z0-9_-]+`

Required: No

### **creationDate**

The date when this mitigation action was created.

Type: Timestamp

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for Ruby V3](#)



# MitigationActionParams

Service: Amazon IoT

The set of parameters for this mitigation action. You can specify only one type of parameter (in other words, you can apply only one action for each defined mitigation action).

## Contents

### **addThingsToThingGroupParams**

Parameters to define a mitigation action that moves devices associated with a certificate to one or more specified thing groups, typically for quarantine.

Type: [AddThingsToThingGroupParams](#) object

Required: No

### **enableIoTLoggingParams**

Parameters to define a mitigation action that enables Amazon IoT Core logging at a specified level of detail.

Type: [EnableIoTLoggingParams](#) object

Required: No

### **publishFindingToSnsParams**

Parameters to define a mitigation action that publishes findings to Amazon Simple Notification Service (Amazon SNS). You can implement your own custom actions in response to the Amazon SNS messages.

Type: [PublishFindingToSnsParams](#) object

Required: No

### **replaceDefaultPolicyVersionParams**

Parameters to define a mitigation action that adds a blank policy to restrict permissions.

Type: [ReplaceDefaultPolicyVersionParams](#) object

Required: No

## updateCACertificateParams

Parameters to define a mitigation action that changes the state of the CA certificate to inactive.

Type: [UpdateCACertificateParams](#) object

Required: No

## updateDeviceCertificateParams

Parameters to define a mitigation action that changes the state of the device certificate to inactive.

Type: [UpdateDeviceCertificateParams](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# Mqtt5Configuration

Service: Amazon IoT

The configuration to add user-defined properties to enrich MQTT 5 messages.

## Contents

### `propagatingAttributes`

An object that represents the propagating thing attributes and the connection attributes.

Type: Array of [PropagatingAttribute](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# MqttContext

Service: Amazon IoT

Specifies the MQTT context to use for the test authorizer request

## Contents

### clientId

The value of the `clientId` key in an MQTT authorization request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65535.

Pattern: `[\s\S]*`

Required: No

### password

The value of the `password` key in an MQTT authorization request.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1. Maximum length of 65535.

Required: No

### username

The value of the `username` key in an MQTT authorization request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 65535.

Pattern: `[\s\S]*`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# MqttHeaders

Service: Amazon IoT

Specifies MQTT Version 5.0 headers information. For more information, see [MQTT](#) from Amazon IoT Core Developer Guide.

## Contents

### contentType

A UTF-8 encoded string that describes the content of the publishing message.

For more information, see [Content Type](#) from the MQTT Version 5.0 specification.

Supports [substitution templates](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

### correlationData

The base64-encoded binary data used by the sender of the request message to identify which request the response message is for when it's received.

For more information, see [Correlation Data](#) from the MQTT Version 5.0 specification.

#### Note

This binary data must be based64-encoded.

Supports [substitution templates](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

## messageExpiry

A user-defined integer value that will persist a message at the message broker for a specified amount of time to ensure that the message will expire if it's no longer relevant to the subscriber. The value of `messageExpiry` represents the number of seconds before it expires. For more information about the limits of `messageExpiry`, see [Amazon IoT Core message broker and protocol limits and quotas](#) from the Amazon Reference Guide.

Supports [substitution templates](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

## payloadFormatIndicator

An Enum string value that indicates whether the payload is formatted as UTF-8.

Valid values are `UNSPECIFIED_BYTES` and `UTF8_DATA`.

For more information, see [Payload Format Indicator](#) from the MQTT Version 5.0 specification.

Supports [substitution templates](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

## responseTopic

A UTF-8 encoded string that's used as the topic name for a response message. The response topic is used to describe the topic which the receiver should publish to as part of the request-response flow. The topic must not contain wildcard characters.

For more information, see [Response Topic](#) from the MQTT Version 5.0 specification.

Supports [substitution templates](#).

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

### **userProperties**

An array of key-value pairs that you define in the MQTT5 header.

Type: Array of [UserProperty](#) objects

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# NonCompliantResource

Service: Amazon IoT

Information about the resource that was noncompliant with the audit check.

## Contents

### additionalInfo

Other information about the noncompliant resource.

Type: String to string map

Required: No

### resourceIdentifier

Information that identifies the noncompliant resource.

Type: [ResourceIdentifier](#) object

Required: No

### resourceType

The type of the noncompliant resource.

Type: String

Valid Values: DEVICE\_CERTIFICATE | CA\_CERTIFICATE | IOT\_POLICY | COGNITO\_IDENTITY\_POOL | CLIENT\_ID | ACCOUNT\_SETTINGS | ROLE\_ALIAS | IAM\_ROLE | ISSUER\_CERTIFICATE

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for Ruby V3](#)

# OpenSearchAction

Service: Amazon IoT

Describes an action that writes data to an Amazon OpenSearch Service domain.

## Contents

### endpoint

The endpoint of your OpenSearch domain.

Type: String

Pattern: `https?://.*`

Required: Yes

### id

The unique identifier for the document you are storing.

Type: String

Required: Yes

### index

The OpenSearch index where you want to store your data.

Type: String

Required: Yes

### roleArn

The IAM role ARN that has access to OpenSearch.

Type: String

Required: Yes

### type

The type of document you are storing.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# OTAUpdateFile

Service: Amazon IoT

Describes a file to be associated with an OTA update.

## Contents

### attributes

A list of name-attribute pairs. They won't be sent to devices as a part of the Job document.

Type: String to string map

Value Length Constraints: Minimum length of 0. Maximum length of 4096.

Value Pattern: `[\s\S]*`

Required: No

### codeSigning

The code signing method of the file.

Type: [CodeSigning](#) object

Required: No

### fileLocation

The location of the updated firmware.

Type: [FileLocation](#) object

Required: No

### fileName

The name of the file.

Type: String

Required: No

### fileType

An integer value you can include in the job document to allow your devices to identify the type of file received from the cloud.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 255.

Required: No

### **fileVersion**

The file version.

Type: String

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# OTAUpdateInfo

Service: Amazon IoT

Information about an OTA update.

## Contents

### **additionalParameters**

A collection of name/value pairs

Type: String to string map

Value Length Constraints: Minimum length of 0. Maximum length of 4096.

Value Pattern: `[\s\S]*`

Required: No

### **awsIotJobArn**

The Amazon IoT job ARN associated with the OTA update.

Type: String

Required: No

### **awsIotJobId**

The Amazon IoT job ID associated with the OTA update.

Type: String

Required: No

### **awsIotJobExecutionsRolloutConfig**

Configuration for the rollout of OTA updates.

Type: [AwsIotJobExecutionsRolloutConfig](#) object

Required: No

### **awsIotJobPresignedUrlConfig**

Configuration information for pre-signed URLs. Valid when `protocols` contains HTTP.

Type: [AwsJobPresignedUrlConfig](#) object

Required: No

### **creationDate**

The date when the OTA update was created.

Type: Timestamp

Required: No

### **description**

A description of the OTA update.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: No

### **errorInfo**

Error information associated with the OTA update.

Type: [ErrorInfo](#) object

Required: No

### **lastModifiedDate**

The date when the OTA update was last updated.

Type: Timestamp

Required: No

### **otaUpdateArn**

The OTA update ARN.

Type: String

Required: No



## **otaUpdateFiles**

A list of files associated with the OTA update.

Type: Array of [OTAUpdateFile](#) objects

Array Members: Minimum number of 1 item.

Required: No

## **otaUpdateId**

The OTA update ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

## **otaUpdateStatus**

The status of the OTA update.

Type: String

Valid Values: CREATE\_PENDING | CREATE\_IN\_PROGRESS | CREATE\_COMPLETE |  
CREATE\_FAILED | DELETE\_IN\_PROGRESS | DELETE\_FAILED

Required: No

## **protocols**

The protocol used to transfer the OTA update image. Valid values are [HTTP], [MQTT], [HTTP, MQTT]. When both HTTP and MQTT are specified, the target device can choose the protocol.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 2 items.

Valid Values: MQTT | HTTP

Required: No

## targets

The targets of the OTA update.

Type: Array of strings

Array Members: Minimum number of 1 item.

Required: No

## targetSelection

Specifies whether the OTA update will continue to run (CONTINUOUS), or will be complete after all those things specified as targets have completed the OTA update (SNAPSHOT). If continuous, the OTA update may also be run on a thing when a change is detected in a target. For example, an OTA update will run on a thing when the thing is added to a target group, even after the OTA update was completed by all things originally in the group.

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# OTAUpdateSummary

Service: Amazon IoT

An OTA update summary.

## Contents

### creationDate

The date when the OTA update was created.

Type: Timestamp

Required: No

### otaUpdateArn

The OTA update ARN.

Type: String

Required: No

### otaUpdateId

The OTA update ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# OutgoingCertificate

Service: Amazon IoT

A certificate that has been transferred but not yet accepted.

## Contents

### **certificateArn**

The certificate ARN.

Type: String

Required: No

### **certificateId**

The certificate ID.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: No

### **creationDate**

The certificate creation date.

Type: Timestamp

Required: No

### **transferDate**

The date the transfer was initiated.

Type: Timestamp

Required: No

### **transferMessage**

The transfer message.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\s\S]*`

Required: No

### **transferredTo**

The Amazon Web Services account to which the transfer was made.

Type: String

Length Constraints: Fixed length of 12.

Pattern: `[0-9]+`

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# PackageSummary

Service: Amazon IoT

A summary of information about a software package.

## Contents

### creationDate

The date that the package was created.

Type: Timestamp

Required: No

### defaultVersionName

The name of the default package version.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_.]+

Required: No

### lastModifiedDate

The date that the package was last updated.

Type: Timestamp

Required: No

### packageName

The name for the target software package.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# PackageVersionArtifact

Service: Amazon IoT

A specific package version artifact associated with a software package version.

## Contents

### s3Location

The S3 location.

Type: [S3Location](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# PackageVersionSummary

Service: Amazon IoT

A summary of information about a package version.

## Contents

### creationDate

The date that the package version was created.

Type: Timestamp

Required: No

### lastModifiedDate

The date that the package version was last updated.

Type: Timestamp

Required: No

### packageName

The name of the associated software package.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9-\_.]+

Required: No

### status

The status of the package version. For more information, see [Package version lifecycle](#).

Type: String

Valid Values: DRAFT | PUBLISHED | DEPRECATED

Required: No

## versionName

The name of the target package version.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_.]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# PercentPair

Service: Amazon IoT

Describes the percentile and percentile value.

## Contents

### percent

The percentile.

Type: Double

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

### value

The value of the percentile.

Type: Double

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# Policy

Service: Amazon IoT

Describes an Amazon IoT policy.

## Contents

### **policyArn**

The policy ARN.

Type: String

Required: No

### **policyName**

The policy name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# PolicyVersion

Service: Amazon IoT

Describes a policy version.

## Contents

### **createDate**

The date and time the policy was created.

Type: Timestamp

Required: No

### **isDefaultVersion**

Specifies whether the policy version is the default.

Type: Boolean

Required: No

### **versionId**

The policy version ID.

Type: String

Pattern: [0-9]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# PolicyVersionIdentifier

Service: Amazon IoT

Information about the version of the policy associated with the resource.

## Contents

### policyName

The name of the policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w+=, .@- ]+`

Required: No

### policyVersionId

The ID of the version of the policy associated with the resource.

Type: String

Pattern: `[0-9 ]+`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# PresignedUrlConfig

Service: Amazon IoT

Configuration for pre-signed S3 URLs.

## Contents

### expiresInSec

How long (in seconds) pre-signed URLs are valid. Valid values are 60 - 3600, the default value is 3600 seconds. Pre-signed URLs are generated when Jobs receives an MQTT request for the job document.

Type: Long

Valid Range: Minimum value of 60. Maximum value of 3600.

Required: No

### roleArn

The ARN of an IAM role that grants permission to download files from the S3 bucket where the job data/updates are stored. The role must also grant permission for IoT to download the files.

#### Important

For information about addressing the confused deputy problem, see [cross-service confused deputy prevention](#) in the *Amazon IoT Core developer guide*.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:



- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# PrincipalThingObject

Service: Amazon IoT

An object that represents the thing and the type of relation it has with the principal.

## Contents

### thingName

The name of the thing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

Required: Yes

### thingPrincipalType

The type of the relation you want to specify when you attach a principal to a thing. The value defaults to `NON_EXCLUSIVE_THING`.

- `EXCLUSIVE_THING` - Attaches the specified principal to the specified thing, exclusively. The thing will be the only thing that's attached to the principal.
- `NON_EXCLUSIVE_THING` - Attaches the specified principal to the specified thing. Multiple things can be attached to the principal.

Type: String

Valid Values: `EXCLUSIVE_THING` | `NON_EXCLUSIVE_THING`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for Ruby V3](#)

# PropagatingAttribute

Service: Amazon IoT

An object that represents the connection attribute, thing attribute, and the user property key.

## Contents

### connectionAttribute

The attribute associated with the connection between a device and Amazon IoT Core.

Type: String

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9: . ]+

Required: No

### thingAttribute

The user-defined thing attribute that is propagating for MQTT 5 message enrichment.

Type: String

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9\_.,@/:#- ]+

Required: No

### userPropertyKey

The key of the user property key-value pair.

Type: String

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9:\$. ]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ProvisioningHook

Service: Amazon IoT

Structure that contains `payloadVersion` and `targetArn`.

## Contents

### **targetArn**

The ARN of the target function.

*Note:* Only Lambda functions are currently supported.

Type: String

Length Constraints: Maximum length of 2048.

Required: Yes

### **payloadVersion**

The payload that was sent to the target function.

*Note:* Only Lambda functions are currently supported.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 32.

Pattern: `^[0-9-]+$`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# ProvisioningTemplateSummary

Service: Amazon IoT

A summary of information about a provisioning template.

## Contents

### **creationDate**

The date when the provisioning template summary was created.

Type: Timestamp

Required: No

### **description**

The description of the provisioning template.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

Pattern: [^\p{C}]\*

Required: No

### **enabled**

True if the fleet provision template is enabled, otherwise false.

Type: Boolean

Required: No

### **lastModifiedDate**

The date when the provisioning template summary was last modified.

Type: Timestamp

Required: No

### **templateArn**

The ARN of the provisioning template.



Type: String

Required: No

### **templateName**

The name of the provisioning template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

Required: No

### **type**

The type you define in a provisioning template. You can create a template with only one type. You can't change the template type after its creation. The default value is `FLEET_PROVISIONING`. For more information about provisioning template, see: [Provisioning template](#).

Type: String

Valid Values: `FLEET_PROVISIONING` | `JITP`

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ProvisioningTemplateVersionSummary

Service: Amazon IoT

A summary of information about a fleet provision template version.

## Contents

### creationDate

The date when the provisioning template version was created

Type: Timestamp

Required: No

### isDefaultVersion

True if the provisioning template version is the default version, otherwise false.

Type: Boolean

Required: No

### versionId

The ID of the fleet provisioning template version.

Type: Integer

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# PublishFindingToSnsParams

Service: Amazon IoT

Parameters to define a mitigation action that publishes findings to Amazon SNS. You can implement your own custom actions in response to the Amazon SNS messages.

## Contents

### topicArn

The ARN of the topic to which you want to publish the findings.

Type: String

Length Constraints: Maximum length of 350.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# PutAssetPropertyValueEntry

Service: Amazon IoT

An asset property value entry containing the following information.

## Contents

### propertyValues

A list of property values to insert that each contain timestamp, quality, and value (TQV) information.

Type: Array of [AssetPropertyValue](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

### assetId

The ID of the Amazon IoT SiteWise asset. You must specify either a `propertyAlias` or both an `aliasId` and a `propertyId`. Accepts substitution templates.

Type: String

Required: No

### entryId

Optional. A unique identifier for this entry that you can define to better track which message caused an error in case of failure. Accepts substitution templates. Defaults to a new UUID.

Type: String

Required: No

### propertyAlias

The name of the property alias associated with your asset property. You must specify either a `propertyAlias` or both an `aliasId` and a `propertyId`. Accepts substitution templates.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### **propertyId**

The ID of the asset's property. You must specify either a `propertyAlias` or both an `aliasId` and a `propertyId`. Accepts substitution templates.

Type: String

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# PutItemInput

Service: Amazon IoT

The input for the DynamoActionVS action that specifies the DynamoDB table to which the message data will be written.

## Contents

### tableName

The table where the message data will be written.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# RateIncreaseCriteria

Service: Amazon IoT

Allows you to define a criteria to initiate the increase in rate of rollout for a job.

## Contents

### numberOfNotifiedThings

The threshold for number of notified things that will initiate the increase in rate of rollout.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

### numberOfSucceededThings

The threshold for number of succeeded things that will initiate the increase in rate of rollout.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# RegistrationConfig

Service: Amazon IoT

The registration configuration.

## Contents

### roleArn

The ARN of the role.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### templateBody

The template body.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 10240.

Pattern: `[\s\S]*`

Required: No

### templateName

The name of the provisioning template.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 36.

Pattern: `^[0-9A-Za-z_-]+$`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:



- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## RelatedResource

Service: Amazon IoT

Information about a related resource.

### Contents

#### additionalInfo

Other information about the resource.

Type: String to string map

Required: No

#### resourceIdentifier

Information that identifies the resource.

Type: [ResourceIdentifier](#) object

Required: No

#### resourceType

The type of resource.

Type: String

Valid Values: DEVICE\_CERTIFICATE | CA\_CERTIFICATE | IOT\_POLICY | COGNITO\_IDENTITY\_POOL | CLIENT\_ID | ACCOUNT\_SETTINGS | ROLE\_ALIAS | IAM\_ROLE | ISSUER\_CERTIFICATE

Required: No

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)

- [Amazon SDK for Ruby V3](#)

# ReplaceDefaultPolicyVersionParams

Service: Amazon IoT

Parameters to define a mitigation action that adds a blank policy to restrict permissions.

## Contents

### templateName

The name of the template to be applied. The only supported value is BLANK\_POLICY.

Type: String

Valid Values: BLANK\_POLICY

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# RepublishAction

Service: Amazon IoT

Describes an action to republish to another topic.

## Contents

### roleArn

The ARN of the IAM role that grants access.

Type: String

Required: Yes

### topic

The name of the MQTT topic.

Type: String

Required: Yes

### headers

MQTT Version 5.0 headers information. For more information, see [MQTT](#) from the Amazon IoT Core Developer Guide.

Type: [MqttHeaders](#) object

Required: No

### qos

The Quality of Service (QoS) level to use when republishing messages. The default value is 0.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 1.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ResourceIdentifier

Service: Amazon IoT

Information that identifies the noncompliant resource.

## Contents

### account

The account with which the resource is associated.

Type: String

Length Constraints: Fixed length of 12.

Pattern: [0-9]+

Required: No

### caCertificateId

The ID of the CA certificate used to authorize the certificate.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: No

### clientId

The client ID.

Type: String

Required: No

### cognitoIdentityPoolId

The ID of the Amazon Cognito identity pool.

Type: String

Required: No

### **deviceCertificateArn**

The ARN of the identified device certificate.

Type: String

Required: No

### **deviceCertificateId**

The ID of the certificate attached to the resource.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

Required: No

### **iamRoleArn**

The ARN of the IAM role that has overly permissive actions.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### **issuerCertificateIdentifier**

The issuer certificate identifier.

Type: [IssuerCertificateIdentifier](#) object

Required: No

### **policyVersionIdentifier**

The version of the policy associated with the resource.

Type: [PolicyVersionIdentifier](#) object

Required: No



## **roleAliasArn**

The ARN of the role alias that has overly permissive actions.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# RetryCriteria

Service: Amazon IoT

The criteria that determines how many retries are allowed for each failure type for a job.

## Contents

### failureType

The type of job execution failures that can initiate a job retry.

Type: String

Valid Values: FAILED | TIMED\_OUT | ALL

Required: Yes

### numberOfRetries

The number of retries allowed for a failure type for the job.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 10.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## RoleAliasDescription

Service: Amazon IoT

Role alias description.

### Contents

#### **creationDate**

The UNIX timestamp of when the role alias was created.

Type: Timestamp

Required: No

#### **credentialDurationSeconds**

The number of seconds for which the credential is valid.

Type: Integer

Valid Range: Minimum value of 900. Maximum value of 43200.

Required: No

#### **lastModifiedDate**

The UNIX timestamp of when the role alias was last modified.

Type: Timestamp

Required: No

#### **owner**

The role alias owner.

Type: String

Length Constraints: Fixed length of 12.

Pattern: [0-9]+

Required: No

## roleAlias

The role alias.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[\w=, @- ]+`

Required: No

## roleAliasArn

The ARN of the role alias.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

## roleArn

The role ARN.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## S3Action

Service: Amazon IoT

Describes an action to write data to an Amazon S3 bucket.

### Contents

#### bucketName

The Amazon S3 bucket.

Type: String

Required: Yes

#### key

The object key. For more information, see [Actions, resources, and condition keys for Amazon S3](#).

Type: String

Required: Yes

#### roleArn

The ARN of the IAM role that grants access.

Type: String

Required: Yes

#### cannedAcl

The Amazon S3 canned ACL that controls access to the object identified by the object key. For more information, see [S3 canned ACLs](#).

Type: String

Valid Values: `private` | `public-read` | `public-read-write` | `aws-exec-read` | `authenticated-read` | `bucket-owner-read` | `bucket-owner-full-control` | `log-delivery-write`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## S3Destination

Service: Amazon IoT

Describes the location of updated firmware in S3.

### Contents

#### bucket

The S3 bucket that contains the updated firmware.

Type: String

Length Constraints: Minimum length of 1.

Required: No

#### prefix

The S3 prefix.

Type: String

Required: No

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## S3Location

Service: Amazon IoT

The S3 location.

### Contents

#### bucket

The S3 bucket.

Type: String

Length Constraints: Minimum length of 1.

Required: No

#### key

The S3 key.

Type: String

Length Constraints: Minimum length of 1.

Required: No

#### version

The S3 bucket version.

Type: String

Required: No

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)





# SalesforceAction

Service: Amazon IoT

Describes an action to write a message to a Salesforce IoT Cloud Input Stream.

## Contents

### token

The token used to authenticate access to the Salesforce IoT Cloud Input Stream. The token is available from the Salesforce IoT Cloud platform after creation of the Input Stream.

Type: String

Length Constraints: Minimum length of 40.

Required: Yes

### url

The URL exposed by the Salesforce IoT Cloud Input Stream. The URL is available from the Salesforce IoT Cloud platform after creation of the Input Stream.

Type: String

Length Constraints: Maximum length of 2000.

Pattern: `https://ingestion-[a-zA-Z0-9]{1,12}\.[a-zA-Z0-9]+\.(sfdc-matrix|.net)|(sfdcnw|.com))/streams/\w{1,20}/\w{1,20}/event`

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# Sbom

Service: Amazon IoT

A specific software bill of materials associated with a software package version.

## Contents

### s3Location

The S3 location.

Type: [S3Location](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# SbomValidationResultSummary

Service: Amazon IoT

A summary of the validation results for a specific software bill of materials (SBOM) attached to a software package version.

## Contents

### errorCode

The `errorCode` representing the validation failure error if the SBOM validation failed.

Type: String

Valid Values: INCOMPATIBLE\_FORMAT | FILE\_SIZE\_LIMIT\_EXCEEDED

Required: No

### errorMessage

The `errorMessage` representing the validation failure error if the SBOM validation failed.

Type: String

Required: No

### fileName

The name of the SBOM file.

Type: String

Required: No

### validationResult

The end result of the SBOM validation.

Type: String

Valid Values: FAILED | SUCCEEDED

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ScheduledAuditMetadata

Service: Amazon IoT

Information about the scheduled audit.

## Contents

### dayOfMonth

The day of the month on which the scheduled audit is run (if the frequency is "MONTHLY"). If days 29-31 are specified, and the month does not have that many days, the audit takes place on the "LAST" day of the month.

Type: String

Pattern: `^([1-9]|[12][0-9]|3[01])$|^LAST$`

Required: No

### dayOfWeek

The day of the week on which the scheduled audit is run (if the frequency is "WEEKLY" or "BIWEEKLY").

Type: String

Valid Values: SUN | MON | TUE | WED | THU | FRI | SAT

Required: No

### frequency

How often the scheduled audit occurs.

Type: String

Valid Values: DAILY | WEEKLY | BIWEEKLY | MONTHLY

Required: No

### scheduledAuditArn

The ARN of the scheduled audit.

Type: String

Required: No

### **scheduledAuditName**

The name of the scheduled audit.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ScheduledJobRollout

Service: Amazon IoT

Displays the next seven maintenance window occurrences and their start times.

## Contents

### startTime

Displays the start times of the next seven maintenance window occurrences.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# SchedulingConfig

Service: Amazon IoT

Specifies the date and time that a job will begin the rollout of the job document to all devices in the target group. Additionally, you can specify the end behavior for each job execution when it reaches the scheduled end time.

## Contents

### endBehavior

Specifies the end behavior for all job executions after a job reaches the selected endTime. If endTime is not selected when creating the job, then endBehavior does not apply.

Type: String

Valid Values: STOP\_ROLLOUT | CANCEL | FORCE\_CANCEL

Required: No

### endTime

The time a job will stop rollout of the job document to all devices in the target group for a job. The endTime must take place no later than two years from the current time and be scheduled a minimum of thirty minutes from the current time. The minimum duration between startTime and endTime is thirty minutes. The maximum duration between startTime and endTime is two years. The date and time format for the endTime is YYYY-MM-DD for the date and HH:MM for the time.

For more information on the syntax for endTime when using an API command or the Amazon Command Line Interface, see [Timestamp](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

### maintenanceWindows

An optional configuration within the SchedulingConfig to setup a recurring maintenance window with a predetermined start time and duration for the rollout of a job document to all devices in a target group for a job.

Type: Array of [MaintenanceWindow](#) objects

Required: No

### **startTime**

The time a job will begin rollout of the job document to all devices in the target group for a job. The `startTime` can be scheduled up to a year in advance and must be scheduled a minimum of thirty minutes from the current time. The date and time format for the `startTime` is YYYY-MM-DD for the date and HH:MM for the time.

For more information on the syntax for `startTime` when using an API command or the Amazon Command Line Interface, see [Timestamp](#).

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# SecurityProfileIdentifier

Service: Amazon IoT

Identifying information for a Device Defender security profile.

## Contents

### arn

The ARN of the security profile.

Type: String

Required: Yes

### name

The name you've given to the security profile.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# SecurityProfileTarget

Service: Amazon IoT

A target to which an alert is sent when a security profile behavior is violated.

## Contents

### arn

The ARN of the security profile.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# SecurityProfileTargetMapping

Service: Amazon IoT

Information about a security profile and the target associated with it.

## Contents

### securityProfileIdentifier

Information that identifies the security profile.

Type: [SecurityProfileIdentifier](#) object

Required: No

### target

Information about the target (thing group) associated with the security profile.

Type: [SecurityProfileTarget](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ServerCertificateConfig

Service: Amazon IoT

The server certificate configuration.

## Contents

### enableOCSPCheck

A Boolean value that indicates whether Online Certificate Status Protocol (OCSP) server certificate check is enabled or not.

For more information, see [Server certificate configuration for OCSP stapling](#) from Amazon IoT Core Developer Guide.

Type: Boolean

Required: No

### ocspAuthorizedResponderArn

The Amazon Resource Name (ARN) for an X.509 certificate stored in Amazon Certificate Manager (ACM). If provided, Amazon IoT Core will use this certificate to validate the signature of the received OCSP response. The OCSP responder must sign responses using either this authorized responder certificate or the issuing certificate, depending on whether the ARN is provided or not. The certificate must be in the same Amazon Web Services account and region as the domain configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:aws(-cn|-us-gov|-iso-b|-iso)?:acm:[a-z]{2}-(gov-|iso-|isob-)?[a-z]{4,9}-\d{1}:\d{12}:certificate/[a-zA-Z0-9/-]+`

Required: No

### ocspLambdaArn

The Amazon Resource Name (ARN) for a Lambda function that acts as a Request for Comments (RFC) 6960-compliant Online Certificate Status Protocol (OCSP) responder, supporting basic OCSP responses. The Lambda function accepts a base64-encoding of the OCSP request in the

Distinguished Encoding Rules (DER) format. The Lambda function's response is also a base64-encoded OCSP response in the DER format. The response size must not exceed 4 kilobytes (KiB). The Lambda function must be in the same Amazon Web Services account and region as the domain configuration. For more information, see [Configuring server certificate OCSP for private endpoints in Amazon IoT Core](#) from the Amazon IoT Core developer guide.

Type: String

Length Constraints: Maximum length of 140.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ServerCertificateSummary

Service: Amazon IoT

An object that contains information about a server certificate.

## Contents

### serverCertificateArn

The ARN of the server certificate.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `arn:aws(-cn|-us-gov|-iso-b|-iso)?:acm:[a-z]{2}-(gov-|iso-|isob-)?[a-z]{4,9}-\d{1}:\d{12}:certificate/[a-zA-Z0-9/-]+`

Required: No

### serverCertificateStatus

The status of the server certificate.

Type: String

Valid Values: INVALID | VALID

Required: No

### serverCertificateStatusDetail

Details that explain the status of the server certificate.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:



- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# SigningProfileParameter

Service: Amazon IoT

Describes the code-signing profile.

## Contents

### certificateArn

Certificate ARN.

Type: String

Required: No

### certificatePathOnDevice

The location of the code-signing certificate on your device.

Type: String

Required: No

### platform

The hardware platform of your device.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# SigV4Authorization

Service: Amazon IoT

For more information, see [Signature Version 4 signing process](#).

## Contents

### roleArn

The ARN of the signing role.

Type: String

Required: Yes

### serviceName

The service name to use while signing with Sig V4.

Type: String

Required: Yes

### signingRegion

The signing region.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# SnsAction

Service: Amazon IoT

Describes an action to publish to an Amazon SNS topic.

## Contents

### roleArn

The ARN of the IAM role that grants access.

Type: String

Required: Yes

### targetArn

The ARN of the SNS topic.

Type: String

Required: Yes

### messageFormat

(Optional) The message format of the message to publish. Accepted values are "JSON" and "RAW". The default value of the attribute is "RAW". SNS uses this setting to determine if the payload should be parsed and relevant platform-specific bits of the payload should be extracted. To read more about SNS message formats, see <https://docs.amazonaws.cn/sns/latest/dg/json-formats.html> refer to their official documentation.

Type: String

Valid Values: RAW | JSON

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# SqsAction

Service: Amazon IoT

Describes an action to publish data to an Amazon SQS queue.

## Contents

### queueUrl

The URL of the Amazon SQS queue.

Type: String

Required: Yes

### roleArn

The ARN of the IAM role that grants access.

Type: String

Required: Yes

### useBase64

Specifies whether to use Base64 encoding.

Type: Boolean

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# StartSigningJobParameter

Service: Amazon IoT

Information required to start a signing job.

## Contents

### destination

The location to write the code-signed file.

Type: [Destination](#) object

Required: No

### signingProfileName

The code-signing profile name.

Type: String

Required: No

### signingProfileParameter

Describes the code-signing profile.

Type: [SigningProfileParameter](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# StatisticalThreshold

Service: Amazon IoT

A statistical ranking (percentile) that indicates a threshold value by which a behavior is determined to be in compliance or in violation of the behavior.

## Contents

### statistic

The percentile that resolves to a threshold value by which compliance with a behavior is determined. Metrics are collected over the specified period (`durationSeconds`) from all reporting devices in your account and statistical ranks are calculated. Then, the measurements from a device are collected over the same period. If the accumulated measurements from the device fall above or below (`comparisonOperator`) the value associated with the percentile specified, then the device is considered to be in compliance with the behavior, otherwise a violation occurs.

Type: String

Pattern: (p0|p0\.1|p0\.01|p1|p10|p50|p90|p99|p99\.9|p99\.99|p100)

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# Statistics

Service: Amazon IoT

A map of key-value pairs for all supported statistics. For issues with missing or unexpected values for this API, consult [Fleet indexing troubleshooting guide](#).

## Contents

### average

The average of the aggregated field values.

Type: Double

Required: No

### count

The count of things that match the query string criteria and contain a valid aggregation field value.

Type: Integer

Required: No

### maximum

The maximum aggregated field value.

Type: Double

Required: No

### minimum

The minimum aggregated field value.

Type: Double

Required: No

### stdDeviation

The standard deviation of the aggregated field values.

Type: Double

Required: No

### **sum**

The sum of the aggregated field values.

Type: Double

Required: No

### **sumOfSquares**

The sum of the squares of the aggregated field values.

Type: Double

Required: No

### **variance**

The variance of the aggregated field values.

Type: Double

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# StatusReason

Service: Amazon IoT

Provide additional context about the status of a command execution using a reason code and description.

## Contents

### reasonCode

A code that provides additional context for the command execution status.

Type: String

Length Constraints: Maximum length of 64.

Pattern: [A-Z0-9\_- ]+

Required: Yes

### reasonDescription

A literal string for devices to optionally provide additional information about the reason code for a command execution status.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: [^\p{C}]\*

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# StepFunctionsAction

Service: Amazon IoT

Starts execution of a Step Functions state machine.

## Contents

### roleArn

The ARN of the role that grants IoT permission to start execution of a state machine ("Action":"states:StartExecution").

Type: String

Required: Yes

### stateMachineName

The name of the Step Functions state machine whose execution will be started.

Type: String

Required: Yes

### executionNamePrefix

(Optional) A name will be given to the state machine execution consisting of this prefix followed by a UUID. Step Functions automatically creates a unique name for each state machine execution if one is not provided.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# Stream

Service: Amazon IoT

Describes a group of files that can be streamed.

## Contents

### fileId

The ID of a file associated with a stream.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 255.

Required: No

### streamId

The stream ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_- ]+

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# StreamFile

Service: Amazon IoT

Represents a file to stream.

## Contents

### fileId

The file ID.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 255.

Required: No

### s3Location

The location of the file in S3.

Type: [S3Location](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# StreamInfo

Service: Amazon IoT

Information about a stream.

## Contents

### createdAt

The date when the stream was created.

Type: Timestamp

Required: No

### description

The description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

Required: No

### files

The files to stream.

Type: Array of [StreamFile](#) objects

Array Members: Minimum number of 1 item. Maximum number of 50 items.

Required: No

### lastUpdatedAt

The date when the stream was last updated.

Type: Timestamp

Required: No

**roleArn**

An IAM role Amazon IoT assumes to access your S3 files.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

**streamArn**

The stream ARN.

Type: String

Required: No

**streamId**

The stream ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

**streamVersion**

The stream version.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 65535.

Required: No

**See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# StreamSummary

Service: Amazon IoT

A summary of a stream.

## Contents

### description

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

Required: No

### streamArn

The stream ARN.

Type: String

Required: No

### streamId

The stream ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### streamVersion

The stream version.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 65535.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# Tag

Service: Amazon IoT

A set of key/value pairs that are used to manage the resource.

## Contents

### Key

The tag's key.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^([\p{L}\p{Z}\p{N}_.:/=+\-@]*)$`

Required: Yes

### Value

The tag's value.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TaskStatistics

Service: Amazon IoT

Statistics for the checks performed during the audit.

## Contents

### **canceledChecks**

The number of checks that did not run because the audit was canceled.

Type: Integer

Required: No

### **compliantChecks**

The number of checks that found compliant resources.

Type: Integer

Required: No

### **failedChecks**

The number of checks.

Type: Integer

Required: No

### **inProgressChecks**

The number of checks in progress.

Type: Integer

Required: No

### **nonCompliantChecks**

The number of checks that found noncompliant resources.

Type: Integer

Required: No

## **totalChecks**

The number of checks in this audit.

Type: Integer

Required: No

## **waitingForDataCollectionChecks**

The number of checks waiting for data collection.

Type: Integer

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# TaskStatisticsForAuditCheck

Service: Amazon IoT

Provides summary counts of how many tasks for findings are in a particular state. This information is included in the response from DescribeAuditMitigationActionsTask.

## Contents

### **canceledFindingsCount**

The number of findings to which the mitigation action task was canceled when applied.

Type: Long

Required: No

### **failedFindingsCount**

The number of findings for which at least one of the actions failed when applied.

Type: Long

Required: No

### **skippedFindingsCount**

The number of findings skipped because of filter conditions provided in the parameters to the command.

Type: Long

Required: No

### **succeededFindingsCount**

The number of findings for which all mitigation actions succeeded when applied.

Type: Long

Required: No

### **totalFindingsCount**

The total number of findings to which a task is being applied.

Type: Long

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TermsAggregation

Service: Amazon IoT

Performs an aggregation that will return a list of buckets. The list of buckets is a ranked list of the number of occurrences of an aggregation field value.

## Contents

### maxBuckets

The number of buckets to return in the response. Default to 10.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 10000.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ThingAttribute

Service: Amazon IoT

The properties of the thing, including thing name, thing type name, and a list of thing attributes.

## Contents

### attributes

A list of thing attributes which are name-value pairs.

Type: String to string map

Key Length Constraints: Maximum length of 128.

Key Pattern: [a-zA-Z0-9\_.,@/:#-]+

Value Length Constraints: Maximum length of 800.

Value Pattern: [a-zA-Z0-9\_.,@/:#=\[\]-]\*

Required: No

### thingArn

The thing ARN.

Type: String

Required: No

### thingName

The name of the thing.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### thingTypeName

The name of the thing type, if the thing has been associated with a type.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### **version**

The version of the thing record in the registry.

Type: Long

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ThingConnectivity

Service: Amazon IoT

The connectivity status of the thing.

## Contents

### **connected**

True if the thing is connected to the Amazon IoT Core service; false if it is not connected.

Type: Boolean

Required: No

### **disconnectReason**

The reason why the client is disconnected. If the thing has been disconnected for approximately an hour, the `disconnectReason` value might be missing.

Type: String

Required: No

### **timestamp**

The epoch time (in milliseconds) when the thing last connected or disconnected. If the thing has been disconnected for approximately an hour, the time value might be missing.

Type: Long

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ThingDocument

Service: Amazon IoT

The thing search index document.

## Contents

### attributes

The attributes.

Type: String to string map

Key Length Constraints: Maximum length of 128.

Key Pattern: [a-zA-Z0-9\_.,@/:#-]+

Value Length Constraints: Maximum length of 800.

Value Pattern: [a-zA-Z0-9\_.,@/:#=\[\]-]\*

Required: No

### connectivity

Indicates whether the thing is connected to the Amazon IoT Core service.

Type: [ThingConnectivity](#) object

Required: No

### deviceDefender

Contains Device Defender data.

For more information about Device Defender, see [Device Defender](#).

Type: String

Required: No

### shadow

The unnamed shadow and named shadow.

For more information about shadows, see [Amazon IoT Device Shadow service](#).

Type: String

Required: No

### **thingGroupNames**

Thing group and billing group names.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_- ]+

Required: No

### **thingId**

The thing ID.

Type: String

Required: No

### **thingName**

The thing name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_- ]+

Required: No

### **thingTypeName**

The thing type name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9: \_- ]+



Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ThingGroupDocument

Service: Amazon IoT

The thing group search index document.

## Contents

### attributes

The thing group attributes.

Type: String to string map

Key Length Constraints: Maximum length of 128.

Key Pattern: `[a-zA-Z0-9_.,@/:#-]+`

Value Length Constraints: Maximum length of 800.

Value Pattern: `[a-zA-Z0-9_.,@/:#=\[\]-]*`

Required: No

### parentGroupNames

Parent group names.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: No

### thingGroupDescription

The thing group description.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[\p{Graph}\x20]*`

Required: No

### **thingGroupId**

The thing group ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\ - ]+

Required: No

### **thingGroupName**

The thing group name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_ - ]+

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ThingGroupIndexingConfiguration

Service: Amazon IoT

Thing group indexing configuration.

## Contents

### thingGroupIndexingMode

Thing group indexing mode.

Type: String

Valid Values: OFF | ON

Required: Yes

### customFields

A list of thing group fields to index. This list cannot contain any managed fields. Use the `GetIndexingConfiguration` API to get a list of managed fields.

Contains custom field names and their data type.

Type: Array of [Field](#) objects

Required: No

### managedFields

Contains fields that are indexed and whose types are already known by the Fleet Indexing service. This is an optional field. For more information, see [Managed fields](#) in the *Amazon IoT Core Developer Guide*.

#### Note

You can't modify managed fields by updating fleet indexing configuration.

Type: Array of [Field](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ThingGroupMetadata

Service: Amazon IoT

Thing group metadata.

## Contents

### creationDate

The UNIX timestamp of when the thing group was created.

Type: Timestamp

Required: No

### parentGroupName

The parent thing group name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_- ]+

Required: No

### rootToParentThingGroups

The root parent thing group.

Type: Array of [GroupNameAndArn](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# ThingGroupProperties

Service: Amazon IoT

Thing group properties.

## Contents

### attributePayload

The thing group attributes in JSON format.

Type: [AttributePayload](#) object

Required: No

### thingGroupDescription

The thing group description.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[\p{Graph}\x20]*`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# ThingIndexingConfiguration

Service: Amazon IoT

The thing indexing configuration. For more information, see [Managing Thing Indexing](#).

## Contents

### thingIndexingMode

Thing indexing mode. Valid values are:

- REGISTRY – Your thing index contains registry data only.
- REGISTRY\_AND\_SHADOW - Your thing index contains registry and shadow data.
- OFF - Thing indexing is disabled.

Type: String

Valid Values: OFF | REGISTRY | REGISTRY\_AND\_SHADOW

Required: Yes

### customFields

Contains custom field names and their data type.

Type: Array of [Field](#) objects

Required: No

### deviceDefenderIndexingMode

Device Defender indexing mode. Valid values are:

- VIOLATIONS – Your thing index contains Device Defender violations. To enable Device Defender indexing, *deviceDefenderIndexingMode* must not be set to OFF.
- OFF - Device Defender indexing is disabled.

For more information about Device Defender violations, see [Device Defender Detect](#).

Type: String

Valid Values: OFF | VIOLATIONS

Required: No

## filter

Provides additional selections for named shadows and geolocation data.

To add named shadows to your fleet indexing configuration, set `namedShadowIndexingMode` to be ON and specify your shadow names in `namedShadowNames` filter.

To add geolocation data to your fleet indexing configuration:

- If you store geolocation data in a class/unnamed shadow, set `thingIndexingMode` to be `REGISTRY_AND_SHADOW` and specify your geolocation data in `geoLocations` filter.
- If you store geolocation data in a named shadow, set `namedShadowIndexingMode` to be ON, add the shadow name in `namedShadowNames` filter, and specify your geolocation data in `geoLocations` filter. For more information, see [Managing fleet indexing](#).

Type: [IndexingFilter](#) object

Required: No

## managedFields

Contains fields that are indexed and whose types are already known by the Fleet Indexing service. This is an optional field. For more information, see [Managed fields](#) in the *Amazon IoT Core Developer Guide*.

### Note

You can't modify managed fields by updating fleet indexing configuration.

Type: Array of [Field](#) objects

Required: No

## namedShadowIndexingMode

Named shadow indexing mode. Valid values are:

- ON – Your thing index contains named shadow. To enable thing named shadow indexing, `namedShadowIndexingMode` must not be set to OFF.
- OFF - Named shadow indexing is disabled.

For more information about Shadows, see [Amazon IoT Device Shadow service](#).

Type: String

Valid Values: OFF | ON

Required: No

### **thingConnectivityIndexingMode**

Thing connectivity indexing mode. Valid values are:

- STATUS – Your thing index contains connectivity status. To enable thing connectivity indexing, *thingIndexMode* must not be set to OFF.
- OFF - Thing connectivity status indexing is disabled.

Type: String

Valid Values: OFF | STATUS

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ThingPrincipalObject

Service: Amazon IoT

An object that represents the principal and the type of relation it has with the thing.

## Contents

### principal

The principal of the thing principal object.

Type: String

Required: Yes

### thingPrincipalType

The type of the relation you want to specify when you attach a principal to a thing. The value defaults to `NON_EXCLUSIVE_THING`.

- `EXCLUSIVE_THING` - Attaches the specified principal to the specified thing, exclusively. The thing will be the only thing that's attached to the principal.
- `NON_EXCLUSIVE_THING` - Attaches the specified principal to the specified thing. Multiple things can be attached to the principal.

Type: String

Valid Values: `EXCLUSIVE_THING` | `NON_EXCLUSIVE_THING`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ThingTypeDefinition

Service: Amazon IoT

The definition of the thing type, including thing type name and description.

## Contents

### thingTypeArn

The thing type ARN.

Type: String

Required: No

### thingTypeMetadata

The ThingTypeMetadata contains additional information about the thing type including: creation date and time, a value indicating whether the thing type is deprecated, and a date and time when it was deprecated.

Type: [ThingTypeMetadata](#) object

Required: No

### thingTypeName

The name of the thing type.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### thingTypeProperties

The ThingTypeProperties for the thing type.

Type: [ThingTypeProperties](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ThingTypeMetadata

Service: Amazon IoT

The ThingTypeMetadata contains additional information about the thing type including: creation date and time, a value indicating whether the thing type is deprecated, and a date and time when time was deprecated.

## Contents

### creationDate

The date and time when the thing type was created.

Type: Timestamp

Required: No

### deprecated

Whether the thing type is deprecated. If **true**, no new things could be associated with this type.

Type: Boolean

Required: No

### deprecationDate

The date and time when the thing type was deprecated.

Type: Timestamp

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ThingTypeProperties

Service: Amazon IoT

The ThingTypeProperties contains information about the thing type including: a thing type description, and a list of searchable thing attribute names.

## Contents

### mqtt5Configuration

The configuration to add user-defined properties to enrich MQTT 5 messages.

Type: [Mqtt5Configuration](#) object

Required: No

### searchableAttributes

A list of searchable thing attribute names.

Type: Array of strings

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9\_.,@/:#-]+

Required: No

### thingTypeDescription

The description of the thing type.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [\p{Graph}\x20]\*

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:



- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TimeFilter

Service: Amazon IoT

A filter that can be used to list command executions for a device that started or completed before or after a particular date and time.

## Contents

### after

Filter to display command executions that started or completed only after a particular date and time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

### before

Filter to display command executions that started or completed only before a particular date and time.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TimeoutConfig

Service: Amazon IoT

Specifies the amount of time each device has to finish its execution of the job. A timer is started when the job execution status is set to IN\_PROGRESS. If the job execution status is not set to another terminal state before the timer expires, it will be automatically set to TIMED\_OUT.

## Contents

### inProgressTimeoutInMinutes

Specifies the amount of time, in minutes, this device has to finish execution of this job. The timeout interval can be anywhere between 1 minute and 7 days (1 to 10080 minutes). The in progress timer can't be updated and will apply to all job executions for the job. Whenever a job execution remains in the IN\_PROGRESS status for longer than this interval, the job execution will fail and switch to the terminal TIMED\_OUT status.

Type: Long

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TimestreamAction

Service: Amazon IoT

The Timestream rule action writes attributes (measures) from an MQTT message into an Amazon Timestream table. For more information, see the [Timestream](#) topic rule action documentation.

## Contents

### databaseName

The name of an Amazon Timestream database.

Type: String

Required: Yes

### dimensions

Metadata attributes of the time series that are written in each measure record.

Type: Array of [TimestreamDimension](#) objects

Array Members: Minimum number of 1 item. Maximum number of 128 items.

Required: Yes

### roleArn

The ARN of the role that grants permission to write to the Amazon Timestream database table.

Type: String

Required: Yes

### tableName

The name of the database table into which to write the measure records.

Type: String

Required: Yes

### timestamp

Specifies an application-defined value to replace the default value assigned to the Timestream record's timestamp in the `time` column.

You can use this property to specify the value and the precision of the Timestream record's timestamp. You can specify a value from the message payload or a value computed by a substitution template.

If omitted, the topic rule action assigns the timestamp, in milliseconds, at the time it processed the rule.

Type: [TimestreamTimestamp](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TimestreamDimension

Service: Amazon IoT

Metadata attributes of the time series that are written in each measure record.

## Contents

### name

The metadata dimension name. This is the name of the column in the Amazon Timestream database table record.

Dimensions cannot be named: `measure_name`, `measure_value`, or `time`. These names are reserved. Dimension names cannot start with `ts_` or `measure_value` and they cannot contain the colon (`:`) character.

Type: String

Required: Yes

### value

The value to write in this column of the database record.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TimestreamTimestamp

Service: Amazon IoT

Describes how to interpret an application-defined timestamp value from an MQTT message payload and the precision of that value.

## Contents

### unit

The precision of the timestamp value that results from the expression described in `value`.

Valid values: SECONDS | MILLISECONDS | MICROSECONDS | NANoseconds. The default is MILLISECONDS.

Type: String

Required: Yes

### value

An expression that returns a long epoch time value.

Type: String

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TlsConfig

Service: Amazon IoT

An object that specifies the TLS configuration for a domain.

## Contents

### securityPolicy

The security policy for a domain configuration. For more information, see [Security policies](#) in the *Amazon IoT Core developer guide*.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\s\S]*`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# TlsContext

Service: Amazon IoT

Specifies the TLS context to use for the test authorizer request.

## Contents

### serverName

The value of the `serverName` key in a TLS authorization request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 253.

Pattern: `[\s\S]*`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TopicRule

Service: Amazon IoT

Describes a rule.

## Contents

### actions

The actions associated with the rule.

Type: Array of [Action](#) objects

Array Members: Minimum number of 0 items. Maximum number of 10 items.

Required: No

### awsIotSqlVersion

The version of the SQL rules engine to use when evaluating the rule.

Type: String

Required: No

### createdAt

The date and time the rule was created.

Type: Timestamp

Required: No

### description

The description of the rule.

Type: String

Required: No

### errorAction

The action to perform when an error occurs.

Type: [Action](#) object

Required: No

### **ruleDisabled**

Specifies whether the rule is disabled.

Type: Boolean

Required: No

### **ruleName**

The name of the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^[a-zA-Z0-9_]+$`

Required: No

### **sql**

The SQL statement used to query the topic. When using a SQL query with multiple lines, be sure to escape the newline characters.

Type: String

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TopicRuleDestination

Service: Amazon IoT

A topic rule destination.

## Contents

### arn

The topic rule destination URL.

Type: String

Required: No

### createdAt

The date and time when the topic rule destination was created.

Type: Timestamp

Required: No

### httpUrlProperties

Properties of the HTTP URL.

Type: [HttpUrlDestinationProperties](#) object

Required: No

### lastUpdatedAt

The date and time when the topic rule destination was last updated.

Type: Timestamp

Required: No

### status

The status of the topic rule destination. Valid values are:

IN\_PROGRESS

A topic rule destination was created but has not been confirmed. You can set status to IN\_PROGRESS by calling UpdateTopicRuleDestination. Calling

UpdateTopicRuleDestination causes a new confirmation challenge to be sent to your confirmation endpoint.

#### ENABLED

Confirmation was completed, and traffic to this destination is allowed. You can set status to DISABLED by calling UpdateTopicRuleDestination.

#### DISABLED

Confirmation was completed, and traffic to this destination is not allowed. You can set status to ENABLED by calling UpdateTopicRuleDestination.

#### ERROR

Confirmation could not be completed, for example if the confirmation timed out. You can call GetTopicRuleDestination for details about the error. You can set status to IN\_PROGRESS by calling UpdateTopicRuleDestination. Calling UpdateTopicRuleDestination causes a new confirmation challenge to be sent to your confirmation endpoint.

Type: String

Valid Values: ENABLED | IN\_PROGRESS | DISABLED | ERROR | DELETING

Required: No

#### **statusReason**

Additional details or reason why the topic rule destination is in the current status.

Type: String

Required: No

#### **vpcProperties**

Properties of the virtual private cloud (VPC) connection.

Type: [VpcDestinationProperties](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TopicRuleDestinationConfiguration

Service: Amazon IoT

Configuration of the topic rule destination.

## Contents

### httpUrlConfiguration

Configuration of the HTTP URL.

Type: [HttpUrlDestinationConfiguration](#) object

Required: No

### vpcConfiguration

Configuration of the virtual private cloud (VPC) connection.

Type: [VpcDestinationConfiguration](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TopicRuleDestinationSummary

Service: Amazon IoT

Information about the topic rule destination.

## Contents

### arn

The topic rule destination ARN.

Type: String

Required: No

### createdAt

The date and time when the topic rule destination was created.

Type: Timestamp

Required: No

### httpUrlSummary

Information about the HTTP URL.

Type: [HttpUrlDestinationSummary](#) object

Required: No

### lastUpdatedAt

The date and time when the topic rule destination was last updated.

Type: Timestamp

Required: No

### status

The status of the topic rule destination. Valid values are:

IN\_PROGRESS

A topic rule destination was created but has not been confirmed. You can set status to IN\_PROGRESS by calling UpdateTopicRuleDestination. Calling



UpdateTopicRuleDestination causes a new confirmation challenge to be sent to your confirmation endpoint.

#### ENABLED

Confirmation was completed, and traffic to this destination is allowed. You can set status to DISABLED by calling UpdateTopicRuleDestination.

#### DISABLED

Confirmation was completed, and traffic to this destination is not allowed. You can set status to ENABLED by calling UpdateTopicRuleDestination.

#### ERROR

Confirmation could not be completed, for example if the confirmation timed out. You can call GetTopicRuleDestination for details about the error. You can set status to IN\_PROGRESS by calling UpdateTopicRuleDestination. Calling UpdateTopicRuleDestination causes a new confirmation challenge to be sent to your confirmation endpoint.

Type: String

Valid Values: ENABLED | IN\_PROGRESS | DISABLED | ERROR | DELETING

Required: No

#### **statusReason**

The reason the topic rule destination is in the current status.

Type: String

Required: No

#### **vpcDestinationSummary**

Information about the virtual private cloud (VPC) connection.

Type: [VpcDestinationSummary](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TopicRuleListItem

Service: Amazon IoT

Describes a rule.

## Contents

### **createdAt**

The date and time the rule was created.

Type: Timestamp

Required: No

### **ruleArn**

The rule ARN.

Type: String

Required: No

### **ruleDisabled**

Specifies whether the rule is disabled.

Type: Boolean

Required: No

### **ruleName**

The name of the rule.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^[a-zA-Z0-9_]+$`

Required: No

### **topicPattern**

The pattern for the topic names that apply.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TopicRulePayload

Service: Amazon IoT

Describes a rule.

## Contents

### actions

The actions associated with the rule.

Type: Array of [Action](#) objects

Array Members: Minimum number of 0 items. Maximum number of 10 items.

Required: Yes

### sql

The SQL statement used to query the topic. For more information, see [Amazon IoT SQL Reference](#) in the *Amazon IoT Developer Guide*.

Type: String

Required: Yes

### awsIotSqlVersion

The version of the SQL rules engine to use when evaluating the rule.

Type: String

Required: No

### description

The description of the rule.

Type: String

Required: No

### errorAction

The action to take when an error occurs.

Type: [Action](#) object

Required: No

### **ruleDisabled**

Specifies whether the rule is disabled.

Type: Boolean

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TransferData

Service: Amazon IoT

Data used to transfer a certificate to an Amazon Web Services account.

## Contents

### **acceptDate**

The date the transfer was accepted.

Type: Timestamp

Required: No

### **rejectDate**

The date the transfer was rejected.

Type: Timestamp

Required: No

### **rejectReason**

The reason why the transfer was rejected.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\s\S]*`

Required: No

### **transferDate**

The date the transfer took place.

Type: Timestamp

Required: No

### **transferMessage**

The transfer message.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[\s\S]*`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# UpdateCACertificateParams

Service: Amazon IoT

Parameters to define a mitigation action that changes the state of the CA certificate to inactive.

## Contents

### action

The action that you want to apply to the CA certificate. The only supported value is DEACTIVATE.

Type: String

Valid Values: DEACTIVATE

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# UpdateDeviceCertificateParams

Service: Amazon IoT

Parameters to define a mitigation action that changes the state of the device certificate to inactive.

## Contents

### action

The action that you want to apply to the device certificate. The only supported value is DEACTIVATE.

Type: String

Valid Values: DEACTIVATE

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# UserProperty

Service: Amazon IoT

A key-value pair that you define in the header. Both the key and the value are either literal strings or valid [substitution templates](#).

## Contents

### key

A key to be specified in UserProperty.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: Yes

### value

A value to be specified in UserProperty.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ValidationError

Service: Amazon IoT

Information about an error found in a behavior specification.

## Contents

### errorMessage

The description of an error found in the behaviors.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## VersionUpdateByJobsConfig

Service: Amazon IoT

Configuration to manage IoT Job's package version reporting. If configured, Jobs updates the thing's reserved named shadow with the package version information up on successful job completion.

**Note:** For each job, the `destinationPackageVersions` attribute has to be set with the correct data for Jobs to report to the thing shadow.

### Contents

#### enabled

Indicates whether the Job is enabled or not.

Type: Boolean

Required: No

#### roleArn

The Amazon Resource Name (ARN) of the role that grants permission to the Amazon IoT jobs service to update the reserved named shadow when the job successfully completes.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ViolationEvent

Service: Amazon IoT

Information about a Device Defender security profile behavior violation.

## Contents

### behavior

The behavior that was violated.

Type: [Behavior](#) object

Required: No

### metricValue

The value of the metric (the measurement).

Type: [MetricValue](#) object

Required: No

### securityProfileName

The name of the security profile whose behavior was violated.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### thingName

The name of the thing responsible for the violation event.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: No

**verificationState**

The verification state of the violation (detect alarm).

Type: String

Valid Values: FALSE\_POSITIVE | BENIGN\_POSITIVE | TRUE\_POSITIVE | UNKNOWN

Required: No

**verificationStateDescription**

The description of the verification state of the violation.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: [^\p{Cntrl}]\*

Required: No

**violationEventAdditionalInfo**

The details of a violation event.

Type: [ViolationEventAdditionalInfo](#) object

Required: No

**violationEventTime**

The time the violation event occurred.

Type: Timestamp

Required: No

**violationEventType**

The type of violation event.

Type: String

Valid Values: in-alarm | alarm-cleared | alarm-invalidated

Required: No

**violationId**

The ID of the violation event.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9\-\-]+

Required: No

**See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# ViolationEventAdditionalInfo

Service: Amazon IoT

The details of a violation event.

## Contents

### confidenceLevel

The sensitivity of anomalous behavior evaluation. Can be Low, Medium, or High.

Type: String

Valid Values: LOW | MEDIUM | HIGH

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# ViolationEventOccurrenceRange

Service: Amazon IoT

Specifies the time period of which violation events occurred between.

## Contents

### endTime

The end date and time of a time period in which violation events occurred.

Type: Timestamp

Required: Yes

### startTime

The start date and time of a time period in which violation events occurred.

Type: Timestamp

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# VpcDestinationConfiguration

Service: Amazon IoT

The configuration information for a virtual private cloud (VPC) destination.

## Contents

### roleArn

The ARN of a role that has permission to create and attach to elastic network interfaces (ENIs).

Type: String

Required: Yes

### subnetIds

The subnet IDs of the VPC destination.

Type: Array of strings

Required: Yes

### vpcId

The ID of the VPC.

Type: String

Required: Yes

### securityGroups

The security groups of the VPC destination.

Type: Array of strings

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# VpcDestinationProperties

Service: Amazon IoT

The properties of a virtual private cloud (VPC) destination.

## Contents

### roleArn

The ARN of a role that has permission to create and attach to elastic network interfaces (ENIs).

Type: String

Required: No

### securityGroups

The security groups of the VPC destination.

Type: Array of strings

Required: No

### subnetIds

The subnet IDs of the VPC destination.

Type: Array of strings

Required: No

### vpclId

The ID of the VPC.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# VpcDestinationSummary

Service: Amazon IoT

The summary of a virtual private cloud (VPC) destination.

## Contents

### roleArn

The ARN of a role that has permission to create and attach to elastic network interfaces (ENIs).

Type: String

Required: No

### securityGroups

The security groups of the VPC destination.

Type: Array of strings

Required: No

### subnetIds

The subnet IDs of the VPC destination.

Type: Array of strings

Required: No

### vpclId

The ID of the VPC.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## Amazon IoT data

The following data types are supported by Amazon IoT data:

- [RetainedMessageSummary](#)



# RetainedMessageSummary

Service: Amazon IoT data

Information about a single retained message.

## Contents

### lastModifiedTime

The Epoch date and time, in milliseconds, when the retained message was stored by Amazon IoT.

Type: Long

Required: No

### payloadSize

The size of the retained message's payload in bytes.

Type: Long

Required: No

### qos

The quality of service (QoS) level used to publish the retained message.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 1.

Required: No

### topic

The topic name to which the retained message was published.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## Amazon IoT jobs data

The following data types are supported by Amazon IoT jobs data:

- [CommandParameterValue](#)
- [JobExecution](#)
- [JobExecutionState](#)
- [JobExecutionSummary](#)

# CommandParameterValue

Service: Amazon IoT jobs data

The list of values used to describe a specific command parameter.

## Contents

### B

An attribute of type Boolean. For example:

```
"BOOL": true
```

Type: Boolean

Required: No

### BIN

An attribute of type Binary.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1.

Required: No

### D

An attribute of type Double (Sixty-Four Bits).

Type: Double

Required: No

### I

An attribute of type Integer (Thirty-Two Bits).

Type: Integer

Required: No

### L

An attribute of type Long.

Type: Long

Required: No

## S

An attribute of type String. For example:

```
"S": "Hello"
```

Type: String

Length Constraints: Minimum length of 1.

Required: No

## UL

An attribute of type Unsigned Long.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20.

Pattern: `^[0-9]*$`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## JobExecution

Service: Amazon IoT jobs data

Contains data about a job execution.

### Contents

#### **approximateSecondsBeforeTimedOut**

The estimated number of seconds that remain before the job execution status will be changed to TIMED\_OUT. The actual job execution timeout can occur up to 60 seconds later than the estimated duration.

Type: Long

Required: No

#### **executionNumber**

A number that identifies a particular job execution on a particular device. It can be used later in commands that return or update job execution information.

Type: Long

Required: No

#### **jobDocument**

The content of the job document.

Type: String

Length Constraints: Maximum length of 32768.

Required: No

#### **jobId**

The unique identifier you assigned to this job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### **lastUpdatedAt**

The time, in seconds since the epoch, when the job execution was last updated.

Type: Long

Required: No

### **queuedAt**

The time, in seconds since the epoch, when the job execution was enqueued.

Type: Long

Required: No

### **startedAt**

The time, in seconds since the epoch, when the job execution was started.

Type: Long

Required: No

### **status**

The status of the job execution. Can be one of: "QUEUED", "IN\_PROGRESS", "FAILED", "SUCCESS", "CANCELED", "TIMED\_OUT", "REJECTED", or "REMOVED".

Type: String

Valid Values: QUEUED | IN\_PROGRESS | SUCCEEDED | FAILED | TIMED\_OUT | REJECTED | REMOVED | CANCELED

Required: No

### **statusDetails**

A collection of name/value pairs that describe the status of the job execution.

The maximum length of the value in the name/value pair is 1,024 characters.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: [a-zA-Z0-9:\_-]+

Value Length Constraints: Minimum length of 1.

Value Pattern: [^\p{C}]+

Required: No

### **thingName**

The name of the thing that is executing the job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: [a-zA-Z0-9:\_-]+

Required: No

### **versionNumber**

The version of the job execution. Job execution versions are incremented each time they are updated by a device.

Type: Long

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# JobExecutionState

Service: Amazon IoT jobs data

Contains data about the state of a job execution.

## Contents

### status

The status of the job execution. Can be one of: "QUEUED", "IN\_PROGRESS", "FAILED", "SUCCESS", "CANCELED", "TIMED\_OUT", "REJECTED", or "REMOVED".

Type: String

Valid Values: QUEUED | IN\_PROGRESS | SUCCEEDED | FAILED | TIMED\_OUT | REJECTED | REMOVED | CANCELED

Required: No

### statusDetails

A collection of name/value pairs that describe the status of the job execution.

The maximum length of the value in the name/value pair is 1,024 characters.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: [a-zA-Z0-9:\_-]+

Value Length Constraints: Minimum length of 1.

Value Pattern: [^\p{C}]+

Required: No

### versionNumber

The version of the job execution. Job execution versions are incremented each time they are updated by a device.

Type: Long



Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# JobExecutionSummary

Service: Amazon IoT jobs data

Contains a subset of information about a job execution.

## Contents

### **executionNumber**

A number that identifies a particular job execution on a particular device.

Type: Long

Required: No

### **jobId**

The unique identifier you assigned to this job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9\_-]+

Required: No

### **lastUpdatedAt**

The time, in seconds since the epoch, when the job execution was last updated.

Type: Long

Required: No

### **queuedAt**

The time, in seconds since the epoch, when the job execution was enqueued.

Type: Long

Required: No

### **startedAt**

The time, in seconds since the epoch, when the job execution started.

Type: Long

Required: No

### **versionNumber**

The version of the job execution. Job execution versions are incremented each time Amazon IoT Jobs receives an update from a device.

Type: Long

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## **Amazon IoT Core Device Advisor**

The following data types are supported by Amazon IoT Core Device Advisor:

- [DeviceUnderTest](#)
- [GroupResult](#)
- [SuiteDefinitionConfiguration](#)
- [SuiteDefinitionInformation](#)
- [SuiteRunConfiguration](#)
- [SuiteRunInformation](#)
- [TestCaseRun](#)
- [TestCaseScenario](#)
- [TestResult](#)

# DeviceUnderTest

Service: Amazon IoT Core Device Advisor

Information of a test device. A thing ARN, certificate ARN or device role ARN is required.

## Contents

### certificateArn

Lists device's certificate ARN.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### deviceRoleArn

Lists device's role ARN.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### thingArn

Lists device's thing ARN.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# GroupResult

Service: Amazon IoT Core Device Advisor

Show Group Result.

## Contents

### groupId

Group result ID.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: No

### groupName

Group Result Name.

Type: String

Required: No

### tests

Tests under Group Result.

Type: Array of [TestCaseRun](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# SuiteDefinitionConfiguration

Service: Amazon IoT Core Device Advisor

Gets the suite definition configuration.

## Contents

### **devicePermissionRoleArn**

Gets the device permission ARN. This is a required parameter.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

### **rootGroup**

Gets the test suite root group. This is a required parameter. For updating or creating the latest qualification suite, if `intendedForQualification` is set to true, `rootGroup` can be an empty string. If `intendedForQualification` is false, `rootGroup` cannot be an empty string. If `rootGroup` is empty, and `intendedForQualification` is set to true, all the qualification tests are included, and the configuration is default.

For a qualification suite, the minimum length is 0, and the maximum is 2048. For a non-qualification suite, the minimum length is 1, and the maximum is 2048.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Required: Yes

### **suiteDefinitionName**

Gets the suite definition name. This is a required parameter.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

## devices

Gets the devices configured.

Type: Array of [DeviceUnderTest](#) objects

Array Members: Minimum number of 0 items. Maximum number of 2 items.

Required: No

## intendedForQualification

Gets the tests intended for qualification in a suite.

Type: Boolean

Required: No

## isLongDurationTest

Verifies if the test suite is a long duration test.

Type: Boolean

Required: No

## protocol

Sets the MQTT protocol that is configured in the suite definition.

Type: String

Valid Values: `MqttV3_1_1` | `MqttV5` | `MqttV3_1_1_OverWebSocket` | `MqttV5_OverWebSocket`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)



- [Amazon SDK for Ruby V3](#)

## SuiteDefinitionInformation

Service: Amazon IoT Core Device Advisor

Information about the suite definition.

### Contents

#### **createdAt**

Date (in Unix epoch time) when the test suite was created.

Type: Timestamp

Required: No

#### **defaultDevices**

Specifies the devices that are under test for the test suite.

Type: Array of [DeviceUnderTest](#) objects

Array Members: Minimum number of 0 items. Maximum number of 2 items.

Required: No

#### **intendedForQualification**

Specifies if the test suite is intended for qualification.

Type: Boolean

Required: No

#### **isLongDurationTest**

Verifies if the test suite is a long duration test.

Type: Boolean

Required: No

#### **protocol**

Gets the MQTT protocol that is configured in the suite definition.

Type: String

Valid Values: MqttV3\_1\_1 | MqttV5 | MqttV3\_1\_1\_OverWebSocket | MqttV5\_OverWebSocket

Required: No

### **suiteDefinitionId**

Suite definition ID of the test suite.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: No

### **suiteDefinitionName**

Suite name of the test suite.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# SuiteRunConfiguration

Service: Amazon IoT Core Device Advisor

Gets suite run configuration.

## Contents

### primaryDevice

Sets the primary device for the test suite run. This requires a thing ARN or a certificate ARN.

Type: [DeviceUnderTest](#) object

Required: Yes

### parallelRun

TRUE if multiple test suites run in parallel.

Type: Boolean

Required: No

### selectedTestList

Sets test case list.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 100 items.

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# SuiteRunInformation

Service: Amazon IoT Core Device Advisor

Information about the suite run.

Requires permission to access the [SuiteRunInformation](#) action.

## Contents

### createdAt

Date (in Unix epoch time) when the suite run was created.

Type: Timestamp

Required: No

### endAt

Date (in Unix epoch time) when the suite run ended.

Type: Timestamp

Required: No

### failed

Number of test cases that failed in the suite run.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 500.

Required: No

### passed

Number of test cases that passed in the suite run.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 500.

Required: No

**startedAt**

Date (in Unix epoch time) when the suite run was started.

Type: Timestamp

Required: No

**status**

Status of the suite run.

Type: String

Valid Values: PASS | FAIL | CANCELED | PENDING | RUNNING | STOPPING | STOPPED | PASS\_WITH\_WARNINGS | ERROR

Required: No

**suiteDefinitionId**

Suite definition ID of the suite run.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: No

**suiteDefinitionName**

Suite definition name of the suite run.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**suiteDefinitionVersion**

Suite definition version of the suite run.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 255.

Required: No

### **suiteRunId**

Suite run ID of the suite run.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)



# TestCaseRun

Service: Amazon IoT Core Device Advisor

Provides the test case run.

## Contents

### endTime

Provides test case run end time.

Type: Timestamp

Required: No

### failure

Provides test case run failure result.

Type: String

Required: No

### logUrl

Provides test case run log URL.

Type: String

Required: No

### startTime

Provides test case run start time.

Type: Timestamp

Required: No

### status

Provides the test case run status. Status is one of the following:

- PASS: Test passed.
- FAIL: Test failed.

- PENDING: Test has not started running but is scheduled.
- RUNNING: Test is running.
- STOPPING: Test is performing cleanup steps. You will see this status only if you stop a suite run.
- STOPPED Test is stopped. You will see this status only if you stop a suite run.
- PASS\_WITH\_WARNINGS: Test passed with warnings.
- ERROR: Test faced an error when running due to an internal issue.

Type: String

Valid Values: PASS | FAIL | CANCELED | PENDING | RUNNING | STOPPING | STOPPED | PASS\_WITH\_WARNINGS | ERROR

Required: No

### **testCaseDefinitionId**

Provides the test case run definition ID.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: No

### **testCaseDefinitionName**

Provides the test case run definition name.

Type: String

Required: No

### **testCaseRunId**

Provides the test case run ID.

Type: String

Length Constraints: Minimum length of 12. Maximum length of 36.

Required: No

## testScenarios

Provides the test scenarios for the test case run.

Type: Array of [TestCaseScenario](#) objects

Required: No

## warnings

Provides test case run warnings.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TestCaseScenario

Service: Amazon IoT Core Device Advisor

Provides test case scenario.

## Contents

### failure

Provides test case scenario failure result.

Type: String

Required: No

### status

Provides the test case scenario status. Status is one of the following:

- PASS: Test passed.
- FAIL: Test failed.
- PENDING: Test has not started running but is scheduled.
- RUNNING: Test is running.
- STOPPING: Test is performing cleanup steps. You will see this status only if you stop a suite run.
- STOPPED Test is stopped. You will see this status only if you stop a suite run.
- PASS\_WITH\_WARNINGS: Test passed with warnings.
- ERROR: Test faced an error when running due to an internal issue.

Type: String

Valid Values: PASS | FAIL | CANCELED | PENDING | RUNNING | STOPPING | STOPPED | PASS\_WITH\_WARNINGS | ERROR

Required: No

### systemMessage

Provides test case scenario system messages if any.

Type: String

Required: No

### **testCaseScenarioId**

Provides test case scenario ID.

Type: String

Required: No

### **testCaseScenarioType**

Provides test case scenario type. Type is one of the following:

- Advanced
- Basic

Type: String

Valid Values: Advanced | Basic

Required: No

## **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TestResult

Service: Amazon IoT Core Device Advisor

Show each group result.

## Contents

### groups

Show each group of test results.

Type: Array of [GroupResult](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## Amazon IoT Fleet Hub

The following data types are supported by Amazon IoT Fleet Hub:

- [ApplicationSummary](#)

# ApplicationSummary

Service: Amazon IoT Fleet Hub

A summary of information about a Fleet Hub for Amazon IoT Device Management web application.

## Note

Amazon will discontinue the Amazon IoT Device Management Fleet Hub feature on October 18, 2025 and is no longer accepting new customers. Existing Amazon IoT Device Management Fleet Hub customers will be able to use Fleet Hub until October 17, 2025. For more information, [Fleet Hub end-of-life \(EOL\) FAQs](#).

## Contents

### applicationId

The unique Id of the web application.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

### applicationName

The name of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^[ -~]*$`

Required: Yes

### applicationUrl

The URL of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `^https\:\/\/\S+$`

Required: Yes

### **applicationCreationDate**

The date (in Unix epoch time) when the web application was created.

Type: Long

Required: No

### **applicationDescription**

An optional description of the web application.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `^[ -~]*$`

Required: No

### **applicationLastUpdateDate**

The date (in Unix epoch time) when the web application was last updated.

Type: Long

Required: No

### **applicationState**

The current state of the web application.

Type: String

Valid Values: `CREATING` | `DELETING` | `ACTIVE` | `CREATE_FAILED` | `DELETE_FAILED`

Required: No



## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

## Amazon IoT Secure Tunneling

The following data types are supported by Amazon IoT Secure Tunneling:

- [ConnectionState](#)
- [DestinationConfig](#)
- [Tag](#)
- [TimeoutConfig](#)
- [Tunnel](#)
- [TunnelSummary](#)

# ConnectionState

Service: Amazon IoT Secure Tunneling

The state of a connection.

## Contents

### lastUpdatedAt

The last time the connection status was updated.

Type: Timestamp

Required: No

### status

The connection status of the tunnel. Valid values are CONNECTED and DISCONNECTED.

Type: String

Valid Values: CONNECTED | DISCONNECTED

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# DestinationConfig

Service: Amazon IoT Secure Tunneling

The destination configuration. You can not use `DestinationConfig` with source `clientMode`.

## Contents

### services

A list of service names that identify the target application. The Amazon IoT client running on the destination device reads this value and uses it to look up a port or an IP address and a port. The Amazon IoT client instantiates the local proxy, which uses this information to connect to the destination application.

Type: Array of strings

Array Members: Minimum number of 1 item.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: Yes

### thingName

The name of the IoT thing to which you want to connect.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9:_-]+`

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)

- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# Tag

Service: Amazon IoT Secure Tunneling

An arbitrary key/value pair used to add searchable metadata to secure tunnel resources.

## Contents

### key

The key of the tag.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern:  $^([\p{L}\p{Z}\p{N}_\p{-}:/+=\@]* )\$$

Required: Yes

### value

The value of the tag.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Pattern:  $^([\p{L}\p{Z}\p{N}_\p{-}:/+=\@]* )\$$

Required: Yes

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TimeoutConfig

Service: Amazon IoT Secure Tunneling

Tunnel timeout configuration.

## Contents

### maxLifetimeTimeoutMinutes

The maximum amount of time (in minutes) a tunnel can remain open. If not specified, maxLifetimeTimeoutMinutes defaults to 720 minutes. Valid values are from 1 minute to 12 hours (720 minutes)

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 720.

Required: No

## See Also

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# Tunnel

Service: Amazon IoT Secure Tunneling

A connection between a source computer and a destination device.

## Contents

### **createdAt**

The time when the tunnel was created.

Type: Timestamp

Required: No

### **description**

A description of the tunnel.

Type: String

Pattern: `[^\p{C}]{1,2048}`

Required: No

### **destinationConfig**

The destination configuration that specifies the thing name of the destination device and a service name that the local proxy uses to connect to the destination application.

Type: [DestinationConfig](#) object

Required: No

### **destinationConnectionState**

The connection state of the destination application.

Type: [ConnectionState](#) object

Required: No

### **lastUpdatedAt**

The last time the tunnel was updated.

Type: Timestamp

Required: No

### **sourceConnectionState**

The connection state of the source application.

Type: [ConnectionState](#) object

Required: No

### **status**

The status of a tunnel. Valid values are: Open and Closed.

Type: String

Valid Values: OPEN | CLOSED

Required: No

### **tags**

A list of tag metadata associated with the secure tunnel.

Type: Array of [Tag](#) objects

Array Members: Minimum number of 1 item. Maximum number of 200 items.

Required: No

### **timeoutConfig**

Timeout configuration for the tunnel.

Type: [TimeoutConfig](#) object

Required: No

### **tunnelArn**

The Amazon Resource Name (ARN) of a tunnel.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.



Required: No

### **tunnelId**

A unique alpha-numeric ID that identifies a tunnel.

Type: String

Pattern: [a-zA-Z0-9\_\-+=:]{1,128}

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# TunnelSummary

Service: Amazon IoT Secure Tunneling

Information about the tunnel.

## Contents

### **createdAt**

The time the tunnel was created.

Type: Timestamp

Required: No

### **description**

A description of the tunnel.

Type: String

Pattern: `[^\p{C}]{1,2048}`

Required: No

### **lastUpdatedAt**

The time the tunnel was last updated.

Type: Timestamp

Required: No

### **status**

The status of a tunnel. Valid values are: Open and Closed.

Type: String

Valid Values: OPEN | CLOSED

Required: No

### **tunnelArn**

The Amazon Resource Name of the tunnel.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Required: No

### **tunnelId**

The unique alpha-numeric identifier for the tunnel.

Type: String

Pattern: [a-zA-Z0-9\_\-+=:]{1,128}

Required: No

### **See Also**

For more information about using this API in one of the language-specific Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon SDK for Ruby V3](#)

# Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see [Signing Amazon API requests](#) in the *IAM User Guide*.

## Action

The action to be performed.

Type: string

Required: Yes

## Version

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

## X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: AWS4-HMAC-SHA256

Required: Conditional

## X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4\_request"). The value is expressed in the following format: *access\_key/YYYYMMDD/region/service/aws4\_request*.

For more information, see [Create a signed Amazon API request](#) in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

### **X-Amz-Date**

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see [Elements of an Amazon API request signature](#) in the *IAM User Guide*.

Type: string

Required: Conditional

### **X-Amz-Security-Token**

The temporary security token that was obtained through a call to Amazon Security Token Service (Amazon STS). For a list of services that support temporary security credentials from Amazon STS, see [Amazon Web Services services that work with IAM](#) in the *IAM User Guide*.

Condition: If you're using temporary security credentials from Amazon STS, you must include the security token.

Type: string

Required: Conditional

### **X-Amz-Signature**

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

### **X-Amz-SignedHeaders**

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see [Create a signed Amazon API request](#) in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional