

# Amazon Cloud Control API



# Amazon Cloud Control API: Welcome

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# Welcome

Use Amazon Cloud Control API to create, read, update, delete, and list (CRUD-L) your cloud resources that belong to a wide range of Amazon services. With the Cloud Control API standardized set of application programming interfaces (APIs), you can perform CRUD-L operations on any supported resources in your Amazon account. Using Cloud Control API, you won't have to generate code or scripts specific to each individual service responsible for those resources.

For more information about Amazon Cloud Control API, see the [Amazon Cloud Control API User Guide](#).

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# Actions

The following actions are supported:

- [CancelResourceRequest](#)
- [CreateResource](#)
- [DeleteResource](#)
- [GetResource](#)
- [GetResourceRequestStatus](#)
- [ListResourceRequests](#)
- [ListResources](#)
- [UpdateResource](#)

# CancelResourceRequest

Cancels the specified resource operation request. For more information, see [Canceling resource operation requests](#) in the *Amazon Cloud Control API User Guide*.

Only resource operations requests with a status of PENDING or IN\_PROGRESS can be canceled.

## Request Syntax

```
{  
  "RequestToken": "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.

### [RequestToken](#)

The RequestToken of the ProgressEvent object returned by the resource operation request.

Type: String

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

Pattern: [-A-Za-z0-9+/=]+

Required: Yes

## Response Syntax

```
{  
  "ProgressEvent": {  
    "ErrorCode": "string",  
    "EventTime": number,  
    "Identifier": "string",  
    "Operation": "string",  
    "OperationStatus": "string",  
  }
```



```
"RequestToken": "string",  
"ResourceModel": "string",  
"RetryAfter": number,  
"StatusMessage": "string",  
"TypeName": "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.

### ProgressEvent

Represents the current status of a resource operation request. For more information, see [Managing resource operation requests](#) in the *Amazon Cloud Control API User Guide*.

Type: [ProgressEvent](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **ConcurrentModificationException**

The resource is currently being modified by another operation.

HTTP Status Code: 500

### **RequestTokenNotFoundException**

A resource operation with the specified request token can't be found.

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

# CreateResource

Creates the specified resource. For more information, see [Creating a resource](#) in the *Amazon Cloud Control API User Guide*.

After you have initiated a resource creation request, you can monitor the progress of your request by calling [GetResourceRequestStatus](#) using the RequestToken of the ProgressEvent type returned by CreateResource.

## Request Syntax

```
{
  "ClientToken": "string",
  "DesiredState": "string",
  "RoleArn": "string",
  "TypeName": "string",
  "TypeVersionId": "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.

### ClientToken

A unique identifier to ensure the idempotency of the resource request. As a best practice, specify this token to ensure idempotency, so that Amazon Cloud Control API can accurately distinguish between request retries and new resource requests. You might retry a resource request to ensure that it was successfully received.

A client token is valid for 36 hours once used. After that, a resource request with the same client token is treated as a new request.

If you do not specify a client token, one is generated for inclusion in the request.

For more information, see [Ensuring resource operation requests are unique](#) in the *Amazon Cloud Control API User Guide*.

Type: String

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

Pattern: [-A-Za-z0-9+/=]+

Required: No

### DesiredState

Structured data format representing the desired state of the resource, consisting of that resource's properties and their desired values.

#### **Note**

Cloud Control API currently supports JSON as a structured data format.

Specify the desired state as one of the following:

- A JSON blob
- A local path containing the desired state in JSON data format

For more information, see [Composing the desired state of the resource](#) in the *Amazon Cloud Control API User Guide*.

For more information about the properties of a specific resource, refer to the related topic for the resource in the [Resource and property types reference](#) in the *Amazon CloudFormation Users Guide*.

Type: String

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

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

Required: Yes

### RoleArn

The Amazon Resource Name (ARN) of the Amazon Identity and Access Management (IAM) role for Cloud Control API to use when performing this resource operation. The role specified must have the permissions required for this operation. The necessary permissions for each event handler are defined in the [handlers](#) section of the [resource type definition schema](#).

If you do not specify a role, Cloud Control API uses a temporary session created using your Amazon user credentials.

For more information, see [Specifying credentials](#) in the *Amazon Cloud Control API User Guide*.

Type: String

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

Pattern: `arn:.*:iam:.*:[0-9]{12}:role/.+`

Required: No

### TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Required: Yes

### TypeVersionId

#### **Important**

TypeVersionId is not available in the China (Beijing) Region or the China (Ningxia) Region.

For private resource types, the type version to use in this resource operation. If you do not specify a resource version, CloudFormation uses the default version.

Type: String

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

Pattern: `[A-Za-z0-9-]+`

Required: No

## Response Syntax

```
{
  "ProgressEvent": {
    "ErrorCode": "string",
    "EventTime": number,
    "Identifier": "string",
    "Operation": "string",
    "OperationStatus": "string",
    "RequestToken": "string",
    "ResourceModel": "string",
    "RetryAfter": number,
    "StatusMessage": "string",
    "TypeName": "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.

### ProgressEvent

Represents the current status of the resource creation request.

After you have initiated a resource creation request, you can monitor the progress of your request by calling [GetResourceRequestStatus](#) using the RequestToken of the ProgressEvent returned by CreateResource.

Type: [ProgressEvent](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AlreadyExistsException**

The resource with the name requested already exists.

HTTP Status Code: 400

**ClientTokenConflictException**

The specified client token has already been used in another resource request.

It's best practice for client tokens to be unique for each resource operation request. However, client token expire after 36 hours.

HTTP Status Code: 400

**ConcurrentOperationException**

Another resource operation is currently being performed on this resource.

HTTP Status Code: 400

**GeneralServiceException**

The resource handler has returned that the downstream service generated an error that doesn't map to any other handler error code.

HTTP Status Code: 400

**HandlerFailureException**

The resource handler has failed without a returning a more specific error code. This can include timeouts.

HTTP Status Code: 500

**HandlerInternalFailureException**

The resource handler has returned that an unexpected error occurred within the resource handler.

HTTP Status Code: 500

**InvalidCredentialsException**

The resource handler has returned that the credentials provided by the user are invalid.

HTTP Status Code: 400

**InvalidRequestException**

The resource handler has returned that invalid input from the user has generated a generic exception.

HTTP Status Code: 400

## **NetworkFailureException**

The resource handler has returned that the request couldn't be completed due to networking issues, such as a failure to receive a response from the server.

HTTP Status Code: 500

## **NotStabilizedException**

The resource handler has returned that the downstream resource failed to complete all of its ready-state checks.

HTTP Status Code: 400

## **NotUpdatableException**

One or more properties included in this resource operation are defined as create-only, and therefore can't be updated.

HTTP Status Code: 400

## **PrivateTypeException**

Cloud Control API hasn't received a valid response from the resource handler, due to a configuration error. This includes issues such as the resource handler returning an invalid response, or timing out.

HTTP Status Code: 400

## **ResourceConflictException**

The resource is temporarily unavailable to be acted upon. For example, if the resource is currently undergoing an operation and can't be acted upon until that operation is finished.

HTTP Status Code: 400

## **ResourceNotFoundException**

A resource with the specified identifier can't be found.

HTTP Status Code: 400

## **ServiceInternalErrorException**

The resource handler has returned that the downstream service returned an internal error, typically with a 5XX HTTP status code.



HTTP Status Code: 500

### **ServiceLimitExceededException**

The resource handler has returned that a non-transient resource limit was reached on the service side.

HTTP Status Code: 400

### **ThrottlingException**

The request was denied due to request throttling.

HTTP Status Code: 400

### **TypeNotFoundException**

The specified extension doesn't exist in the CloudFormation registry.

HTTP Status Code: 400

### **UnsupportedActionException**

The specified resource doesn't support this resource operation.

HTTP Status Code: 400

## **Examples**

### **CreateResource**

The following example creates a resource of type [AWS::Logs::LogGroup](#) named `LogGroupResourceExample` and with a retention policy of 90 days.

### **Sample Request**

```
https://cloudcontrolapi.us-east-1.amazonaws.com/  
?Action=CreateResource  
&TypeName=AWS::Logs::LogGroup  
&DesiredState={"LogGroupName": "LogGroupResourceExample", "RetentionInDays": 90}  
&Version=2021-09-30  
&X-Amz-Algorithm=AWS4-HMAC-SHA256  
&X-Amz-Credential=[Access key ID and scope]  
&X-Amz-Date=20160316T233349Z
```

```
&X-Amz-SignedHeaders=content-type;host
&X-Amz-Signature=[Signature]
```

## Sample Response

```
<CreateResourceResponse xmlns="http://cloudcontrol.amazonaws.com/doc/2021-09-30/">
  <CreateResourceResult>
    <ProgressEvent>
      <Identifier>CloudApiLogGroup</Identifier>
      <OperationStatus>IN_PROGRESS</OperationStatus>
      <EventTime>2021-07-27T18:07:16.468Z</EventTime>
      <TypeName>AWS::Logs::LogGroup</TypeName>
      <RequestToken>f2fcf5a1-7f17-4c7a-b67f-ab0123456789</RequestToken>
      <Operation>CREATE</Operation>
    </ProgressEvent>
  </CreateResourceResult>
  <ResponseMetadata>
    <RequestId>d995ea2f-446c-4688-8656-573123456789</RequestId>
  </ResponseMetadata>
</CreateResourceResponse>
```

## See Also

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

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

# DeleteResource

Deletes the specified resource. For details, see [Deleting a resource](#) in the *Amazon Cloud Control API User Guide*.

After you have initiated a resource deletion request, you can monitor the progress of your request by calling [GetResourceRequestStatus](#) using the RequestToken of the ProgressEvent returned by DeleteResource.

## Request Syntax

```
{
  "ClientToken": "string",
  "Identifier": "string",
  "RoleArn": "string",
  "TypeName": "string",
  "TypeVersionId": "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.

### [ClientToken](#)

A unique identifier to ensure the idempotency of the resource request. As a best practice, specify this token to ensure idempotency, so that Amazon Cloud Control API can accurately distinguish between request retries and new resource requests. You might retry a resource request to ensure that it was successfully received.

A client token is valid for 36 hours once used. After that, a resource request with the same client token is treated as a new request.

If you do not specify a client token, one is generated for inclusion in the request.

For more information, see [Ensuring resource operation requests are unique](#) in the *Amazon Cloud Control API User Guide*.

Type: String

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

Pattern: [-A-Za-z0-9+/=]+

Required: No

## Identifier

The identifier for the resource.

You can specify the primary identifier, or any secondary identifier defined for the resource type in its resource schema. You can only specify one identifier. Primary identifiers can be specified as a string or JSON; secondary identifiers must be specified as JSON.

For compound primary identifiers (that is, one that consists of multiple resource properties strung together), to specify the primary identifier as a string, list the property values *in the order they are specified* in the primary identifier definition, separated by |.

For more information, see [Identifying resources](#) in the *Amazon Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: .+

Required: Yes

## RoleArn

The Amazon Resource Name (ARN) of the Amazon Identity and Access Management (IAM) role for Cloud Control API to use when performing this resource operation. The role specified must have the permissions required for this operation. The necessary permissions for each event handler are defined in the [handlers](#) section of the [resource type definition schema](#).

If you do not specify a role, Cloud Control API uses a temporary session created using your Amazon user credentials.

For more information, see [Specifying credentials](#) in the *Amazon Cloud Control API User Guide*.

Type: String

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

Pattern: `arn:.*:iam:.*:[0-9]{12}:role/.+`

Required: No

### TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Required: Yes

### TypeVersionId

#### Important

TypeVersionId is not available in the China (Beijing) Region or the China (Ningxia) Region.

For private resource types, the type version to use in this resource operation. If you do not specify a resource version, CloudFormation uses the default version.

Type: String

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

Pattern: `[A-Za-z0-9-]+`

Required: No

## Response Syntax

```
{
  "ProgressEvent": {
    "ErrorCode": "string",
    "EventTime": number,
    "Identifier": "string",
```

```
"Operation": "string",
"OperationStatus": "string",
"RequestToken": "string",
"ResourceModel": "string",
"RetryAfter": number,
"StatusMessage": "string",
"TypeName": "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.

### ProgressEvent

Represents the current status of the resource deletion request.

After you have initiated a resource deletion request, you can monitor the progress of your request by calling [GetResourceRequestStatus](#) using the RequestToken of the ProgressEvent returned by DeleteResource.

Type: [ProgressEvent](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AlreadyExistsException**

The resource with the name requested already exists.

HTTP Status Code: 400

### **ClientTokenConflictException**

The specified client token has already been used in another resource request.

It's best practice for client tokens to be unique for each resource operation request. However, client token expire after 36 hours.

HTTP Status Code: 400

### **ConcurrentOperationException**

Another resource operation is currently being performed on this resource.

HTTP Status Code: 400

### **GeneralServiceException**

The resource handler has returned that the downstream service generated an error that doesn't map to any other handler error code.

HTTP Status Code: 400

### **HandlerFailureException**

The resource handler has failed without a returning a more specific error code. This can include timeouts.

HTTP Status Code: 500

### **HandlerInternalFailureException**

The resource handler has returned that an unexpected error occurred within the resource handler.

HTTP Status Code: 500

### **InvalidCredentialsException**

The resource handler has returned that the credentials provided by the user are invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The resource handler has returned that invalid input from the user has generated a generic exception.

HTTP Status Code: 400

### **NetworkFailureException**

The resource handler has returned that the request couldn't be completed due to networking issues, such as a failure to receive a response from the server.

HTTP Status Code: 500

**NotStabilizedException**

The resource handler has returned that the downstream resource failed to complete all of its ready-state checks.

HTTP Status Code: 400

**NotUpdatableException**

One or more properties included in this resource operation are defined as create-only, and therefore can't be updated.

HTTP Status Code: 400

**PrivateTypeException**

Cloud Control API hasn't received a valid response from the resource handler, due to a configuration error. This includes issues such as the resource handler returning an invalid response, or timing out.

HTTP Status Code: 400

**ResourceConflictException**

The resource is temporarily unavailable to be acted upon. For example, if the resource is currently undergoing an operation and can't be acted upon until that operation is finished.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource with the specified identifier can't be found.

HTTP Status Code: 400

**ServiceInternalErrorException**

The resource handler has returned that the downstream service returned an internal error, typically with a 5XX HTTP status code.

HTTP Status Code: 500

**ServiceLimitExceededException**

The resource handler has returned that a non-transient resource limit was reached on the service side.



HTTP Status Code: 400

### **ThrottlingException**

The request was denied due to request throttling.

HTTP Status Code: 400

### **TypeNotFoundException**

The specified extension doesn't exist in the CloudFormation registry.

HTTP Status Code: 400

### **UnsupportedActionException**

The specified resource doesn't support this resource operation.

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

# GetResource

Returns information about the current state of the specified resource. For details, see [Reading a resource's current state](#).

You can use this action to return information about an existing resource in your account and Amazon Web Services Region, whether those resources were provisioned using Cloud Control API.

## Request Syntax

```
{
  "Identifier": "string",
  "RoleArn": "string",
  "TypeName": "string",
  "TypeVersionId": "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.

### Identifier

The identifier for the resource.

You can specify the primary identifier, or any secondary identifier defined for the resource type in its resource schema. You can only specify one identifier. Primary identifiers can be specified as a string or JSON; secondary identifiers must be specified as JSON.

For compound primary identifiers (that is, one that consists of multiple resource properties strung together), to specify the primary identifier as a string, list the property values *in the order they are specified* in the primary identifier definition, separated by |.

For more information, see [Identifying resources](#) in the *Amazon Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: . +

Required: Yes

### RoleArn

The Amazon Resource Name (ARN) of the Amazon Identity and Access Management (IAM) role for Cloud Control API to use when performing this resource operation. The role specified must have the permissions required for this operation. The necessary permissions for each event handler are defined in the [handlers](#) section of the [resource type definition schema](#).

If you do not specify a role, Cloud Control API uses a temporary session created using your Amazon user credentials.

For more information, see [Specifying credentials](#) in the *Amazon Cloud Control API User Guide*.

Type: String

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

Pattern: `arn:.*:iam::[0-9]{12}:role/.+`

Required: No

### TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Required: Yes

### TypeVersionId

#### **Important**

TypeVersionId is not available in the China (Beijing) Region or the China (Ningxia) Region.

For private resource types, the type version to use in this resource operation. If you do not specify a resource version, CloudFormation uses the default version.

Type: String

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

Pattern: [A-Za-z0-9-]+

Required: No

## Response Syntax

```
{
  "ResourceDescription": {
    "Identifier": "string",
    "Properties": "string"
  },
  "TypeName": "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.

### ResourceDescription

Represents information about a provisioned resource.

Type: [ResourceDescription](#) object

### TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: [A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## **AlreadyExistsException**

The resource with the name requested already exists.

HTTP Status Code: 400

## **GeneralServiceException**

The resource handler has returned that the downstream service generated an error that doesn't map to any other handler error code.

HTTP Status Code: 400

## **HandlerFailureException**

The resource handler has failed without returning a more specific error code. This can include timeouts.

HTTP Status Code: 500

## **HandlerInternalFailureException**

The resource handler has returned that an unexpected error occurred within the resource handler.

HTTP Status Code: 500

## **InvalidCredentialsException**

The resource handler has returned that the credentials provided by the user are invalid.

HTTP Status Code: 400

## **InvalidRequestException**

The resource handler has returned that invalid input from the user has generated a generic exception.

HTTP Status Code: 400

## **NetworkFailureException**

The resource handler has returned that the request couldn't be completed due to networking issues, such as a failure to receive a response from the server.

HTTP Status Code: 500

**NotStabilizedException**

The resource handler has returned that the downstream resource failed to complete all of its ready-state checks.

HTTP Status Code: 400

**NotUpdatableException**

One or more properties included in this resource operation are defined as create-only, and therefore can't be updated.

HTTP Status Code: 400

**PrivateTypeException**

Cloud Control API hasn't received a valid response from the resource handler, due to a configuration error. This includes issues such as the resource handler returning an invalid response, or timing out.

HTTP Status Code: 400

**ResourceConflictException**

The resource is temporarily unavailable to be acted upon. For example, if the resource is currently undergoing an operation and can't be acted upon until that operation is finished.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource with the specified identifier can't be found.

HTTP Status Code: 400

**ServiceInternalErrorException**

The resource handler has returned that the downstream service returned an internal error, typically with a 5XX HTTP status code.

HTTP Status Code: 500

**ServiceLimitExceededException**

The resource handler has returned that a non-transient resource limit was reached on the service side.

HTTP Status Code: 400

### ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

### TypeNotFoundException

The specified extension doesn't exist in the CloudFormation registry.

HTTP Status Code: 400

### UnsupportedActionException

The specified resource doesn't support this resource operation.

HTTP Status Code: 400

## Examples

### GetResource

The following example uses the type name and primary identifier of a resource to return summary information about the resource.

### Sample Request

```
https://cloudcontrolapi.us-east-1.amazonaws.com/  
?Action=GetResource  
&TypeName=AWS::Logs::LogGroup  
&Identifier=LogGroupResourceExample  
&Version=2021-09-30  
&X-Amz-Algorithm=AWS4-HMAC-SHA256  
&X-Amz-Credential=[Access key ID and scope]  
&X-Amz-Date=20160316T233349Z  
&X-Amz-SignedHeaders=content-type;host  
&X-Amz-Signature=[Signature]
```

### Sample Response

```
<GetResourceResponse xmlns="http://cloudcontrol.amazonaws.com/doc/2021-09-30/">
```

```
<GetResourceResult>
  <TypeName>AWS::Logs::LogGroup</TypeName>
  <ResourceDescription>

  <ResourceModel>{"RetentionInDays":90,"LogGroupName":"LogGroupResourceExample","Arn":"arn:aws:logs:us-east-1:090123456789:log-group:LogGroupResourceExample:*"}</ResourceModel>
    <Identifier>LogGroupResourceExample</Identifier>
  </ResourceDescription>
</GetResourceResult>
<ResponseMetadata>
  <RequestId>9277ff54-d56e-4a29-95af-b10123456789</RequestId>
</ResponseMetadata>
</GetResourceResponse>
```

## See Also

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

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



# GetResourceRequestStatus

Returns the current status of a resource operation request. For more information, see [Tracking the progress of resource operation requests](#) in the *Amazon Cloud Control API User Guide*.

## Request Syntax

```
{  
  "RequestToken": "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.

### [RequestToken](#)

A unique token used to track the progress of the resource operation request.

Request tokens are included in the `ProgressEvent` type returned by a resource operation request.

Type: String

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

Pattern: `[-A-Za-z0-9+/=]+`

Required: Yes

## Response Syntax

```
{  
  "ProgressEvent": {  
    "ErrorCode": "string",  
    "EventTime": number,  
    "Identifier": "string",  
    "Operation": "string",  
    "OperationStatus": "string",  
  }  
}
```

```
"RequestToken": "string",
"ResourceModel": "string",
"RetryAfter": number,
"StatusMessage": "string",
"TypeName": "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.

### ProgressEvent

Represents the current status of the resource operation request.

Type: [ProgressEvent](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **RequestTokenNotFoundException**

A resource operation with the specified request token can't be found.

HTTP Status Code: 400

## Examples

### **GetResourceRequestStatus**

The following example returns the successful completion status of the specified resource creation operation.

### **Sample Request**

```
https://cloudcontrolapi.us-east-1.amazonaws.com/
```

```
?Action=GetResourceRequestStatus
&RequestToken=b4a1cc5a-a2ae-4dec-9e1e-150123456789
&Version=2021-09-30
&X-Amz-Algorithm=AWS4-HMAC-SHA256
&X-Amz-Credential=[Access key ID and scope]
&X-Amz-Date=20160316T233349Z
&X-Amz-SignedHeaders=content-type;host
&X-Amz-Signature=[Signature]
```

## Sample Response

```
<GetResourceRequestStatusResponse xmlns="http://cloudcontrol.amazonaws.com/
doc/2021-09-30/">
  <GetResourceRequestStatusResult>
    <ProgressEvent>
      <Identifier>LogGroupResourceExample</Identifier>
      <OperationStatus>SUCCESS</OperationStatus>
      <EventTime>2021-07-27T18:52:57.406Z</EventTime>
      <TypeName>AWS::Logs::LogGroup</TypeName>
      <RequestToken>b4a1cc5a-a2ae-4dec-9e1e-150123456789</RequestToken>
      <Operation>CREATE</Operation>
    </ProgressEvent>
  </GetResourceRequestStatusResult>
  <ResponseMetadata>
    <RequestId>620e5d19-0c03-4069-ae3b-9e0123456789</RequestId>
  </ResponseMetadata>
</GetResourceRequestStatusResponse>
```

## See Also

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

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

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

# ListResourceRequests

Returns existing resource operation requests. This includes requests of all status types. For more information, see [Listing active resource operation requests](#) in the *Amazon Cloud Control API User Guide*.

## Note

Resource operation requests expire after 7 days.

## Request Syntax

```
{
  "MaxResults": number,
  "NextToken": "string",
  "ResourceRequestStatusFilter": {
    "Operations": [ "string" ],
    "OperationStatuses": [ "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 be returned with a single call. If the number of available results exceeds this maximum, the response includes a NextToken value that you can assign to the NextToken request parameter to get the next set of results.

The default is 20.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

## NextToken

If the previous paginated request didn't return all of the remaining results, the response object's `NextToken` parameter value is set to a token. To retrieve the next set of results, call this action again and assign that token to the request object's `NextToken` parameter. If there are no remaining results, the previous response object's `NextToken` parameter is set to `null`.

Type: String

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

Pattern: [-A-Za-z0-9+/=]+

Required: No

## ResourceRequestStatusFilter

The filter criteria to apply to the requests returned.

Type: [ResourceRequestStatusFilter](#) object

Required: No

## Response Syntax

```
{
  "NextToken": "string",
  "ResourceRequestStatusSummaries": [
    {
      "ErrorCode": "string",
      "EventTime": number,
      "Identifier": "string",
      "Operation": "string",
      "OperationStatus": "string",
      "RequestToken": "string",
      "ResourceModel": "string",
      "RetryAfter": number,
      "StatusMessage": "string",
      "TypeName": "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

If the request doesn't return all of the remaining results, `NextToken` is set to a token. To retrieve the next set of results, call `ListResources` again and assign that token to the request object's `NextToken` parameter. If the request returns all results, `NextToken` is set to null.

Type: String

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

Pattern: `[-A-Za-z0-9+/=]+`

### ResourceRequestStatusSummaries

The requests that match the specified filter criteria.

Type: Array of [ProgressEvent](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## Examples

### ListResourceRequests

The following example returns all current resource requests. In this case, this includes a successful create and update of a resource, in addition to a create operation that failed because a resource of the specified name already exists.

### Sample Request

```
https://cloudcontrolapi.us-east-1.amazonaws.com/  
?Action=ListResourceRequests
```

```

&Version=2021-09-30
&X-Amz-Algorithm=AWS4-HMAC-SHA256
&X-Amz-Credential=[Access key ID and scope]
&X-Amz-Date=20160316T233349Z
&X-Amz-SignedHeaders=content-type;host
&X-Amz-Signature=[Signature]

```

## Sample Response

```

<ListResourceRequestsResponse xmlns="http://cloudcontrol.amazonaws.com/doc/2021-09-30/">
  <ListResourceRequestsResult>
    <RequestStatusSummaries>
      <member>
        <Identifier>LogGroupResourceExample2</Identifier>
        <OperationStatus>SUCCESS</OperationStatus>
        <TypeName>AWS::Logs::LogGroup</TypeName>
        <EventTime>2021-07-27T19:23:56.094Z</EventTime>
        <RequestToken>6233b409-a77d-4125-85ee-fd0123456789</RequestToken>
        <Operation>UPDATE</Operation>
      </member>
      <member>
        <Identifier>LogGroupResourceExample2</Identifier>
        <OperationStatus>SUCCESS</OperationStatus>
        <TypeName>AWS::Logs::LogGroup</TypeName>
        <EventTime>2021-07-27T18:01:42.788Z</EventTime>
        <RequestToken>71d8afe7-7e83-4136-92f6-420123456789</RequestToken>
        <Operation>CREATE</Operation>
      </member>
      <member>
        <Identifier>LogGroupResourceExample</Identifier>
        <OperationStatus>SUCCESS</OperationStatus>
        <TypeName>AWS::Logs::LogGroup</TypeName>
        <EventTime>2021-07-27T18:52:57.406Z</EventTime>
        <RequestToken>b4a1cc5a-a2ae-4dec-9e1e-150123456789</RequestToken>
        <Operation>CREATE</Operation>
      </member>
      <member>
        <Identifier>LogGroupResourceExample2</Identifier>
        <OperationStatus>FAILED</OperationStatus>
        <TypeName>AWS::Logs::LogGroup</TypeName>
        <EventTime>2021-07-27T18:07:17.005Z</EventTime>
        <ErrorCode>AlreadyExists</ErrorCode>
      </member>
    </RequestStatusSummaries>
  </ListResourceRequestsResult>
</ListResourceRequestsResponse>

```



```

    <RequestToken>f2fcf5a1-7f17-4c7a-b67f-ab0123456789</RequestToken>
    <Operation>CREATE</Operation>
    <StatusMessage>Resource of type 'AWS::Logs::LogGroup' with identifier '{"/
properties/LogGroupName":"LogGroupResourceExample2"}' already exists.</StatusMessage>
  </member>
</RequestStatusSummaries>
</ListResourceRequestsResult>

```

## Filtering ListResourceRequests

The following example returns only the current resource requests for create and update operations that have failed.

### Sample Request

```

https://cloudcontrolapi.us-east-1.amazonaws.com/
?Action=ListResourceRequests
&RequestStatusFilter.OperationStatuses.member.1=FAILED
&RequestStatusFilter.Operations.member.1=CREATE
&RequestStatusFilter.Operations.member.2=UPDATE
&Version=2021-09-30
&X-Amz-Algorithm=AWS4-HMAC-SHA256
&X-Amz-Credential=[Access key ID and scope]
&X-Amz-Date=20160316T233349Z
&X-Amz-SignedHeaders=content-type;host
&X-Amz-Signature=[Signature]

```

### Sample Response

```

<ListResourceRequestsResponse xmlns="http://cloudcontrol.amazonaws.com/
doc/2021-09-30/">
  <ListResourceRequestsResult>
    <RequestStatusSummaries>
      <member>
        <Identifier>LogGroupResourceExample</Identifier>
        <OperationStatus>FAILED</OperationStatus>
        <EventTime>2021-07-27T18:07:17.005Z</EventTime>
        <TypeName>AWS::Logs::LogGroup</TypeName>
        <ErrorCode>AlreadyExists</ErrorCode>
        <RequestToken>f2fcf5a1-7f17-4c7a-b67f-ab0123456789</RequestToken>
        <Operation>CREATE</Operation>

```

```
<StatusMessage>Resource of type 'AWS::Logs::LogGroup' with identifier '{"/
properties/LogGroupName":"LogGroupResourceExample"}' already exists.</StatusMessage>
</member>
</RequestStatusSummaries>
</ListResourceRequestsResult>
<ResponseMetadata>
  <RequestId>34748e01-2885-4410-90a6-870123456789</RequestId>
</ResponseMetadata>
</ListResourceRequestsResponse>
```

## See Also

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

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

# ListResources

Returns information about the specified resources. For more information, see [Discovering resources](#) in the *Amazon Cloud Control API User Guide*.

You can use this action to return information about existing resources in your account and Amazon Web Services Region, whether those resources were provisioned using Cloud Control API.

## Request Syntax

```
{
  "MaxResults": number,
  "NextToken": "string",
  "ResourceModel": "string",
  "RoleArn": "string",
  "TypeName": "string",
  "TypeVersionId": "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](#)

Reserved.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

### [NextToken](#)

If the previous paginated request didn't return all of the remaining results, the response object's `NextToken` parameter value is set to a token. To retrieve the next set of results, call this action again and assign that token to the request object's `NextToken` parameter. If there are no remaining results, the previous response object's `NextToken` parameter is set to `null`.

Type: String

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

Pattern: . +

Required: No

### ResourceModel

The resource model to use to select the resources to return.

Type: String

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

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

Required: No

### RoleArn

The Amazon Resource Name (ARN) of the Amazon Identity and Access Management (IAM) role for Cloud Control API to use when performing this resource operation. The role specified must have the permissions required for this operation. The necessary permissions for each event handler are defined in the [handlers](#) section of the [resource type definition schema](#).

If you do not specify a role, Cloud Control API uses a temporary session created using your Amazon user credentials.

For more information, see [Specifying credentials](#) in the *Amazon Cloud Control API User Guide*.

Type: String

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

Pattern: arn: .+ :iam: : [0-9]{12} :role/. +

Required: No

### TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Required: Yes

## TypeVersionId

### Important

TypeVersionId is not available in the China (Beijing) Region or the China (Ningxia) Region.

For private resource types, the type version to use in this resource operation. If you do not specify a resource version, CloudFormation uses the default version.

Type: String

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

Pattern: `[A-Za-z0-9-]+`

Required: No

## Response Syntax

```
{
  "NextToken": "string",
  "ResourceDescriptions": [
    {
      "Identifier": "string",
      "Properties": "string"
    }
  ],
  "TypeName": "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

If the request doesn't return all of the remaining results, `NextToken` is set to a token. To retrieve the next set of results, call `ListResources` again and assign that token to the request object's `NextToken` parameter. If the request returns all results, `NextToken` is set to null.

Type: String

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

Pattern: . +

### ResourceDescriptions

Information about the specified resources, including primary identifier and resource model.

Type: Array of [ResourceDescription](#) objects

### TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: [A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AlreadyExistsException**

The resource with the name requested already exists.

HTTP Status Code: 400

### **GeneralServiceException**

The resource handler has returned that the downstream service generated an error that doesn't map to any other handler error code.

HTTP Status Code: 400

### **HandlerFailureException**

The resource handler has failed without returning a more specific error code. This can include timeouts.

HTTP Status Code: 500

### **HandlerInternalFailureException**

The resource handler has returned that an unexpected error occurred within the resource handler.

HTTP Status Code: 500

### **InvalidCredentialsException**

The resource handler has returned that the credentials provided by the user are invalid.

HTTP Status Code: 400

### **InvalidRequestException**

The resource handler has returned that invalid input from the user has generated a generic exception.

HTTP Status Code: 400

### **NetworkFailureException**

The resource handler has returned that the request couldn't be completed due to networking issues, such as a failure to receive a response from the server.

HTTP Status Code: 500

### **NotStabilizedException**

The resource handler has returned that the downstream resource failed to complete all of its ready-state checks.

HTTP Status Code: 400

### **NotUpdatableException**

One or more properties included in this resource operation are defined as create-only, and therefore can't be updated.

HTTP Status Code: 400

### **PrivateTypeException**

Cloud Control API hasn't received a valid response from the resource handler, due to a configuration error. This includes issues such as the resource handler returning an invalid response, or timing out.

HTTP Status Code: 400

### **ResourceConflictException**

The resource is temporarily unavailable to be acted upon. For example, if the resource is currently undergoing an operation and can't be acted upon until that operation is finished.

HTTP Status Code: 400

### **ResourceNotFoundException**

A resource with the specified identifier can't be found.

HTTP Status Code: 400

### **ServiceInternalErrorException**

The resource handler has returned that the downstream service returned an internal error, typically with a 5XX HTTP status code.

HTTP Status Code: 500

### **ServiceLimitExceededException**

The resource handler has returned that a non-transient resource limit was reached on the service side.

HTTP Status Code: 400

### **ThrottlingException**

The request was denied due to request throttling.

HTTP Status Code: 400

### **TypeNotFoundException**

The specified extension doesn't exist in the CloudFormation registry.

HTTP Status Code: 400



## UnsupportedActionException

The specified resource doesn't support this resource operation.

HTTP Status Code: 400

## Examples

### ListResources

The following example lists all resources of type `AWS::Logs::LogGroup`.

### Sample Request

```
https://cloudcontrolapi.us-east-1.amazonaws.com/  
?Action=ListResources  
&TypeName=AWS::Logs::LogGroup  
&Version=2021-09-30  
&X-Amz-Algorithm=AWS4-HMAC-SHA256  
&X-Amz-Credential=[Access key ID and scope]  
&X-Amz-Date=20160316T233349Z  
&X-Amz-SignedHeaders=content-type;host  
&X-Amz-Signature=[Signature]
```

### Sample Response

```
<ListResourcesResponse xmlns="http://cloudcontrol.amazonaws.com/doc/2021-09-30/">  
  <ListResourcesResult>  
    <TypeName>AWS::Logs::LogGroup</TypeName>  
    <ResourceDescriptions>  
      <member>  
        <ResourceModel>{"LogGroupName":"/aws/mobilehub/  
reactnativestarter_676534569", "Arn":"arn:aws:logs:us-west-2:090123456789:log-group:/  
aws/mobilehub/reactnativestarter_676534569:*"}</ResourceModel>  
        <Identifier>/aws/mobilehub/reactnativestarter_0123456789</Identifier>  
      </member>  
      <member>  
        <ResourceModel>{"RetentionInDays":90, "LogGroupName":"CloudApiLogGroup", "Arn":"arn:aws:logs:us-  
west-2:090123456789:log-group:CloudApiLogGroup:*"}</ResourceModel>  
        <Identifier>CloudApiLogGroup</Identifier>
```

```
</member>
<member>

  <ResourceModel>{"RetentionInDays":90,"LogGroupName":"LogGroupResourceExample","Arn":"arn:aws:logs:us-west-2:090123456789:log-group:LogGroupResourceExample:*"}</ResourceModel>
    <Identifier>LogGroupResourceExample</Identifier>
  </member>
</ResourceDescriptions>
</ListResourcesResult>
<ResponseMetadata>
  <RequestId>9c4bf1f2-59b3-4231-b349-5f0123456789</RequestId>
</ResponseMetadata>
</ListResourcesResponse>
```

## See Also

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

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

# UpdateResource

Updates the specified property values in the resource.

You specify your resource property updates as a list of patch operations contained in a JSON patch document that adheres to the [RFC 6902 - JavaScript Object Notation \(JSON\) Patch](#) standard.

For details on how Cloud Control API performs resource update operations, see [Updating a resource](#) in the *Amazon Cloud Control API User Guide*.

After you have initiated a resource update request, you can monitor the progress of your request by calling [GetResourceRequestStatus](#) using the RequestToken of the ProgressEvent returned by UpdateResource.

For more information about the properties of a specific resource, refer to the related topic for the resource in the [Resource and property types reference](#) in the *Amazon CloudFormation Users Guide*.

## Request Syntax

```
{
  "ClientToken": "string",
  "Identifier": "string",
  "PatchDocument": "string",
  "RoleArn": "string",
  "TypeName": "string",
  "TypeVersionId": "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.

### [ClientToken](#)

A unique identifier to ensure the idempotency of the resource request. As a best practice, specify this token to ensure idempotency, so that Amazon Cloud Control API can accurately distinguish between request retries and new resource requests. You might retry a resource request to ensure that it was successfully received.

A client token is valid for 36 hours once used. After that, a resource request with the same client token is treated as a new request.

If you do not specify a client token, one is generated for inclusion in the request.

For more information, see [Ensuring resource operation requests are unique](#) in the *Amazon Cloud Control API User Guide*.

Type: String

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

Pattern: [-A-Za-z0-9+/=]+

Required: No

### Identifier

The identifier for the resource.

You can specify the primary identifier, or any secondary identifier defined for the resource type in its resource schema. You can only specify one identifier. Primary identifiers can be specified as a string or JSON; secondary identifiers must be specified as JSON.

For compound primary identifiers (that is, one that consists of multiple resource properties strung together), to specify the primary identifier as a string, list the property values *in the order they are specified* in the primary identifier definition, separated by |.

For more information, see [Identifying resources](#) in the *Amazon Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: .+

Required: Yes

### PatchDocument

A JavaScript Object Notation (JSON) document listing the patch operations that represent the updates to apply to the current resource properties. For details, see [Composing the patch document](#) in the *Amazon Cloud Control API User Guide*.

Type: String

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

Pattern: `[\s\S]*`

Required: Yes

### RoleArn

The Amazon Resource Name (ARN) of the Amazon Identity and Access Management (IAM) role for Cloud Control API to use when performing this resource operation. The role specified must have the permissions required for this operation. The necessary permissions for each event handler are defined in the [handlers](#) section of the [resource type definition schema](#).

If you do not specify a role, Cloud Control API uses a temporary session created using your Amazon user credentials.

For more information, see [Specifying credentials](#) in the *Amazon Cloud Control API User Guide*.

Type: String

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

Pattern: `arn:.*:iam::[0-9]{12}:role/.+`

Required: No

### TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Required: Yes

### TypeVersionId

#### **Important**

TypeVersionId is not available in the China (Beijing) Region or the China (Ningxia) Region.

For private resource types, the type version to use in this resource operation. If you do not specify a resource version, CloudFormation uses the default version.

Type: String

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

Pattern: [A-Za-z0-9-]+

Required: No

## Response Syntax

```
{
  "ProgressEvent": {
    "ErrorCode": "string",
    "EventTime": number,
    "Identifier": "string",
    "Operation": "string",
    "OperationStatus": "string",
    "RequestToken": "string",
    "ResourceModel": "string",
    "RetryAfter": number,
    "StatusMessage": "string",
    "TypeName": "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.

### ProgressEvent

Represents the current status of the resource update request.

Use the RequestToken of the ProgressEvent with [GetResourceRequestStatus](#) to return the current status of a resource operation request.

Type: [ProgressEvent](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AlreadyExistsException**

The resource with the name requested already exists.

HTTP Status Code: 400

### **ClientTokenConflictException**

The specified client token has already been used in another resource request.

It's best practice for client tokens to be unique for each resource operation request. However, client token expire after 36 hours.

HTTP Status Code: 400

### **ConcurrentOperationException**

Another resource operation is currently being performed on this resource.

HTTP Status Code: 400

### **GeneralServiceException**

The resource handler has returned that the downstream service generated an error that doesn't map to any other handler error code.

HTTP Status Code: 400

### **HandlerFailureException**

The resource handler has failed without a returning a more specific error code. This can include timeouts.

HTTP Status Code: 500

### **HandlerInternalFailureException**

The resource handler has returned that an unexpected error occurred within the resource handler.

HTTP Status Code: 500

## **InvalidCredentialsException**

The resource handler has returned that the credentials provided by the user are invalid.

HTTP Status Code: 400

## **InvalidRequestException**

The resource handler has returned that invalid input from the user has generated a generic exception.

HTTP Status Code: 400

## **NetworkFailureException**

The resource handler has returned that the request couldn't be completed due to networking issues, such as a failure to receive a response from the server.

HTTP Status Code: 500

## **NotStabilizedException**

The resource handler has returned that the downstream resource failed to complete all of its ready-state checks.

HTTP Status Code: 400

## **NotUpdatableException**

One or more properties included in this resource operation are defined as create-only, and therefore can't be updated.

HTTP Status Code: 400

## **PrivateTypeException**

Cloud Control API hasn't received a valid response from the resource handler, due to a configuration error. This includes issues such as the resource handler returning an invalid response, or timing out.

HTTP Status Code: 400

## **ResourceConflictException**

The resource is temporarily unavailable to be acted upon. For example, if the resource is currently undergoing an operation and can't be acted upon until that operation is finished.



HTTP Status Code: 400

### **ResourceNotFoundException**

A resource with the specified identifier can't be found.

HTTP Status Code: 400

### **ServiceInternalErrorException**

The resource handler has returned that the downstream service returned an internal error, typically with a 5XX HTTP status code.

HTTP Status Code: 500

### **ServiceLimitExceededException**

The resource handler has returned that a non-transient resource limit was reached on the service side.

HTTP Status Code: 400

### **ThrottlingException**

The request was denied due to request throttling.

HTTP Status Code: 400

### **TypeNotFoundException**

The specified extension doesn't exist in the CloudFormation registry.

HTTP Status Code: 400

### **UnsupportedActionException**

The specified resource doesn't support this resource operation.

HTTP Status Code: 400

## **Examples**

### **UpdateResource**

The following example performs two patch operations on the specified resource. The first operation tests to see if the retention policy is set to 3653 days. If this is the case, the second operation updates the retention policy to 90 days.

## Sample Request

```
https://cloudcontrolapi.us-east-1.amazonaws.com/
?Action=GetResource
&TypeName=AWS::Logs::LogGroup
&Identifier=LogGroupResourceExample
&PatchDocument=[{"op": "test", "path": "RetentionInDays", "value":3653}, {"op":
"replace", "path": "RetentionInDays", "value": 90}]
&Version=2021-09-30
&X-Amz-Algorithm=AWS4-HMAC-SHA256
&X-Amz-Credential=[Access key ID and scope]
&X-Amz-Date=20160316T233349Z
&X-Amz-SignedHeaders=content-type;host
&X-Amz-Signature=[Signature]
```

## Sample Response

```
<UpdateResourceResponse xmlns="http://cloudcontrol.amazonaws.com/doc/2021-09-30/">
  <UpdateResourceResult>
    <ProgressEvent>
      <Identifier>CloudApiLogGroup</Identifier>
      <OperationStatus>IN_PROGRESS</OperationStatus>
      <TypeName>AWS::Logs::LogGroup</TypeName>
      <EventTime>2021-07-27T19:50:29.241Z</EventTime>
      <ResourceModel>{"RetentionInDays":90,"LogGroupName":"CloudApiLogGroup"}</
ResourceModel>
      <RequestToken>332e531e-3435-434e-82e0-de841ff13b25</RequestToken>
      <Operation>UPDATE</Operation>
    </ProgressEvent>
  </UpdateResourceResult>
  <ResponseMetadata>
    <RequestId>f75ec393-dd7c-4ad4-a3e3-d7b9c8468d86</RequestId>
  </ResponseMetadata>
</UpdateResourceResponse>
```

## See Also


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

- [Amazon Command Line Interface](#)

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

# Data Types

The Amazon Cloud Control API API contains several data types that various actions use. This section describes each data type in detail.

 **Note**

The order of each element in a data type structure is not guaranteed. Applications should not assume a particular order.

The following data types are supported:

- [ProgressEvent](#)
- [ResourceDescription](#)
- [ResourceRequestStatusFilter](#)

# ProgressEvent

Represents the current status of a resource operation request. For more information, see [Managing resource operation requests](#) in the *Amazon Cloud Control API User Guide*.

## Contents

### ErrorCode

For requests with a status of FAILED, the associated error code.

For error code definitions, see [Handler error codes](#) in the *CloudFormation Command Line Interface User Guide for Extension Development*.

Type: String

Valid Values: NotUpdatable | InvalidRequest | AccessDenied | InvalidCredentials | AlreadyExists | NotFound | ResourceConflict | Throttling | ServiceLimitExceeded | NotStabilized | GeneralServiceException | ServiceInternalError | ServiceTimeout | NetworkFailure | InternalFailure

Required: No

### EventTime

When the resource operation request was initiated.

Type: Timestamp

Required: No

### Identifier

The primary identifier for the resource.

#### Note

In some cases, the resource identifier may be available before the resource operation has reached a status of SUCCESS.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: . +

Required: No

## Operation

The resource operation type.

Type: String

Valid Values: CREATE | DELETE | UPDATE

Required: No

## OperationStatus

The current status of the resource operation request.

- PENDING: The resource operation hasn't yet started.
- IN\_PROGRESS: The resource operation is currently in progress.
- SUCCESS: The resource operation has successfully completed.
- FAILED: The resource operation has failed. Refer to the error code and status message for more information.
- CANCEL\_IN\_PROGRESS: The resource operation is in the process of being canceled.
- CANCEL\_COMPLETE: The resource operation has been canceled.

Type: String

Valid Values: PENDING | IN\_PROGRESS | SUCCESS | FAILED | CANCEL\_IN\_PROGRESS | CANCEL\_COMPLETE

Required: No

## RequestToken

The unique token representing this resource operation request.

Use the RequestToken with [GetResourceRequestStatus](#) to return the current status of a resource operation request.

Type: String

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

Pattern: [-A-Za-z0-9+/=]+

Required: No

### **ResourceModel**

A JSON string containing the resource model, consisting of each resource property and its current value.

Type: String

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

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

Required: No

### **RetryAfter**

When to next request the status of this resource operation request.

Type: Timestamp

Required: No

### **StatusMessage**

Any message explaining the current status.

Type: String

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

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

Required: No

### **TypeName**

The name of the resource type used in the operation.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: [A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}

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](#)



# ResourceDescription

Represents information about a provisioned resource.

## Contents

### Identifier

The primary identifier for the resource.

For more information, see [Identifying resources](#) in the *Amazon Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: .+

Required: No

### Properties

A list of the resource properties and their current values.

Type: String

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

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](#)

# ResourceRequestStatusFilter

The filter criteria to use in determining the requests returned.

## Contents

### Operations

The operation types to include in the filter.

Type: Array of strings

Valid Values: CREATE | DELETE | UPDATE

Required: No

### OperationStatuses

The operation statuses to include in the filter.

- PENDING: The operation has been requested, but not yet initiated.
- IN\_PROGRESS: The operation is in progress.
- SUCCESS: The operation completed.
- FAILED: The operation failed.
- CANCEL\_IN\_PROGRESS: The operation is in the process of being canceled.
- CANCEL\_COMPLETE: The operation has been canceled.

Type: Array of strings

Valid Values: PENDING | IN\_PROGRESS | SUCCESS | FAILED | CANCEL\_IN\_PROGRESS  
| CANCEL\_COMPLETE

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

# Common Errors

This section lists the errors common to the API actions of all Amazon services. For errors specific to an API action for this service, see the topic for that API action.

## **AccessDeniedException**

You do not have sufficient access to perform this action.

HTTP Status Code: 400

## **IncompleteSignature**

The request signature does not conform to Amazon standards.

HTTP Status Code: 400

## **InternalFailure**

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

## **InvalidAction**

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 400

## **InvalidClientTokenId**

The X.509 certificate or Amazon access key ID provided does not exist in our records.

HTTP Status Code: 403

## **NotAuthorized**

You do not have permission to perform this action.

HTTP Status Code: 400

## **OptInRequired**

The Amazon access key ID needs a subscription for the service.

HTTP Status Code: 403

**RequestExpired**

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

**ServiceUnavailable**

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

**ThrottlingException**

The request was denied due to request throttling.

HTTP Status Code: 400

**ValidationError**

The input fails to satisfy the constraints specified by an Amazon service.

HTTP Status Code: 400