



API Reference

Amazon EKS



Amazon EKS: API Reference

Table of Contents

Welcome	1
Amazon Elastic Kubernetes Service	1
Amazon EKS Auth	1
Actions	2
Amazon Elastic Kubernetes Service	4
AssociateAccessPolicy	7
AssociateEncryptionConfig	13
AssociateIdentityProviderConfig	17
CreateAccessEntry	22
CreateAddon	30
CreateCluster	38
CreateEksAnywhereSubscription	53
CreateFargateProfile	58
CreateNodegroup	66
CreatePodIdentityAssociation	81
DeleteAccessEntry	88
DeleteAddon	92
DeleteCluster	97
DeleteEksAnywhereSubscription	105
DeleteFargateProfile	108
DeleteNodegroup	113
DeletePodIdentityAssociation	120
DeregisterCluster	123
DescribeAccessEntry	129
DescribeAddon	133
DescribeAddonConfiguration	138
DescribeAddonVersions	141
DescribeCluster	147
DescribeClusterVersions	155
DescribeEksAnywhereSubscription	159
DescribeFargateProfile	162
DescribeIdentityProviderConfig	167
DescribeInsight	171
DescribeNodegroup	175

DescribePodIdentityAssociation	182
DescribeUpdate	185
DisassociateAccessPolicy	190
DisassociateIdentityProviderConfig	194
ListAccessEntries	200
ListAccessPolicies	205
ListAddons	210
ListAssociatedAccessPolicies	215
ListClusters	221
ListEksAnywhereSubscriptions	226
ListFargateProfiles	230
ListIdentityProviderConfigs	235
ListInsights	240
ListNodegroups	245
ListPodIdentityAssociations	250
ListTagsForResource	255
ListUpdates	258
RegisterCluster	263
TagResource	271
UntagResource	274
UpdateAccessEntry	276
UpdateAddon	282
UpdateClusterConfig	289
UpdateClusterVersion	300
UpdateEksAnywhereSubscription	306
UpdateNodegroupConfig	310
UpdateNodegroupVersion	317
UpdatePodIdentityAssociation	325
Amazon EKS Auth	329
AssumeRoleForPodIdentity	330
Data Types	337
Amazon Elastic Kubernetes Service	340
AccessConfigResponse	344
AccessEntry	345
AccessPolicy	348
AccessScope	349

Addon	350
AddonCompatibilityDetail	354
AddonHealth	355
AddonInfo	356
AddonIssue	358
AddonPodIdentityAssociations	360
AddonPodIdentityConfiguration	361
AddonVersionInfo	362
AssociatedAccessPolicy	364
AutoScalingGroup	366
BlockStorage	367
Certificate	368
ClientStat	369
Cluster	370
ClusterHealth	376
ClusterIssue	377
ClusterVersionInformation	379
Compatibility	382
ComputeConfigRequest	383
ComputeConfigResponse	385
ConnectorConfigRequest	387
ConnectorConfigResponse	388
ControlPlanePlacementRequest	390
ControlPlanePlacementResponse	391
CreateAccessConfigRequest	392
DeprecationDetail	393
EksAnywhereSubscription	395
EksAnywhereSubscriptionTerm	398
ElasticLoadBalancing	399
EncryptionConfig	400
ErrorDetail	401
FargateProfile	403
FargateProfileHealth	406
FargateProfileIssue	407
FargateProfileSelector	409
Identity	410

IdentityProviderConfig	411
IdentityProviderConfigResponse	412
Insight	413
InsightCategorySpecificSummary	416
InsightResourceDetail	417
InsightsFilter	418
InsightStatus	420
InsightSummary	421
Issue	423
KubernetesNetworkConfigRequest	426
KubernetesNetworkConfigResponse	428
LaunchTemplateSpecification	430
License	432
Logging	433
LogSetup	434
MarketplaceInformation	435
Nodegroup	436
NodegroupHealth	442
NodegroupResources	443
NodegroupScalingConfig	444
NodegroupUpdateConfig	446
NodeRepairConfig	448
OIDC	449
OidcIdentityProviderConfig	450
OidcIdentityProviderConfigRequest	453
OutpostConfigRequest	456
OutpostConfigResponse	458
PodIdentityAssociation	460
PodIdentityAssociationSummary	464
Provider	466
RemoteAccessConfig	467
RemoteNetworkConfigRequest	469
RemoteNetworkConfigResponse	471
RemoteNodeNetwork	472
RemotePodNetwork	474
StorageConfigRequest	476

StorageConfigResponse	477
Taint	478
Update	480
UpdateAccessConfigRequest	482
UpdateLabelsPayload	483
UpdateParam	484
UpdateTaintsPayload	486
UpgradePolicyRequest	487
UpgradePolicyResponse	488
VpcConfigRequest	489
VpcConfigResponse	491
ZonalShiftConfigRequest	494
ZonalShiftConfigResponse	495
Amazon EKS Auth	495
AssumedRoleUser	496
Credentials	497
PodIdentityAssociation	499
Subject	500
Common Parameters	501
Common Errors	504

Welcome

Amazon Elastic Kubernetes Service

Amazon Elastic Kubernetes Service (Amazon EKS) is a managed service that makes it easy for you to run Kubernetes on Amazon without needing to setup or maintain your own Kubernetes control plane. Kubernetes is an open-source system for automating the deployment, scaling, and management of containerized applications.

Amazon EKS runs up-to-date versions of the open-source Kubernetes software, so you can use all the existing plugins and tooling from the Kubernetes community. Applications running on Amazon EKS are fully compatible with applications running on any standard Kubernetes environment, whether running in on-premises data centers or public clouds. This means that you can easily migrate any standard Kubernetes application to Amazon EKS without any code modification required.

Amazon EKS Auth

The Amazon EKS Auth API and the `AssumeRoleForPodIdentity` action are only used by the EKS Pod Identity Agent.

Actions

The following actions are supported by Amazon Elastic Kubernetes Service:

- [AssociateAccessPolicy](#)
- [AssociateEncryptionConfig](#)
- [AssociateIdentityProviderConfig](#)
- [CreateAccessEntry](#)
- [CreateAddon](#)
- [CreateCluster](#)
- [CreateEksAnywhereSubscription](#)
- [CreateFargateProfile](#)
- [CreateNodegroup](#)
- [CreatePodIdentityAssociation](#)
- [DeleteAccessEntry](#)
- [DeleteAddon](#)
- [DeleteCluster](#)
- [DeleteEksAnywhereSubscription](#)
- [DeleteFargateProfile](#)
- [DeleteNodegroup](#)
- [DeletePodIdentityAssociation](#)
- [DeregisterCluster](#)
- [DescribeAccessEntry](#)
- [DescribeAddon](#)
- [DescribeAddonConfiguration](#)
- [DescribeAddonVersions](#)
- [DescribeCluster](#)
- [DescribeClusterVersions](#)
- [DescribeEksAnywhereSubscription](#)
- [DescribeFargateProfile](#)
- [DescribeIdentityProviderConfig](#)

- [DescribeInsight](#)
- [DescribeNodegroup](#)
- [DescribePodIdentityAssociation](#)
- [DescribeUpdate](#)
- [DisassociateAccessPolicy](#)
- [DisassociateIdentityProviderConfig](#)
- [ListAccessEntries](#)
- [ListAccessPolicies](#)
- [ListAddons](#)
- [ListAssociatedAccessPolicies](#)
- [ListClusters](#)
- [ListEksAnywhereSubscriptions](#)
- [ListFargateProfiles](#)
- [ListIdentityProviderConfigs](#)
- [ListInsights](#)
- [ListNodegroups](#)
- [ListPodIdentityAssociations](#)
- [ListTagsForResource](#)
- [ListUpdates](#)
- [RegisterCluster](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateAccessEntry](#)
- [UpdateAddon](#)
- [UpdateClusterConfig](#)
- [UpdateClusterVersion](#)
- [UpdateEksAnywhereSubscription](#)
- [UpdateNodegroupConfig](#)
- [UpdateNodegroupVersion](#)
- [UpdatePodIdentityAssociation](#)

The following actions are supported by Amazon EKS Auth:

- [AssumeRoleForPodIdentity](#)

Amazon Elastic Kubernetes Service

The following actions are supported by Amazon Elastic Kubernetes Service:

- [AssociateAccessPolicy](#)
- [AssociateEncryptionConfig](#)
- [AssociateIdentityProviderConfig](#)
- [CreateAccessEntry](#)
- [CreateAddon](#)
- [CreateCluster](#)
- [CreateEksAnywhereSubscription](#)
- [CreateFargateProfile](#)
- [CreateNodegroup](#)
- [CreatePodIdentityAssociation](#)
- [DeleteAccessEntry](#)
- [DeleteAddon](#)
- [DeleteCluster](#)
- [DeleteEksAnywhereSubscription](#)
- [DeleteFargateProfile](#)
- [DeleteNodegroup](#)
- [DeletePodIdentityAssociation](#)
- [DeregisterCluster](#)
- [DescribeAccessEntry](#)
- [DescribeAddon](#)
- [DescribeAddonConfiguration](#)
- [DescribeAddonVersions](#)
- [DescribeCluster](#)
- [DescribeClusterVersions](#)

- [DescribeEksAnywhereSubscription](#)
- [DescribeFargateProfile](#)
- [DescribeIdentityProviderConfig](#)
- [DescribeInsight](#)
- [DescribeNodegroup](#)
- [DescribePodIdentityAssociation](#)
- [DescribeUpdate](#)
- [DisassociateAccessPolicy](#)
- [DisassociateIdentityProviderConfig](#)
- [ListAccessEntries](#)
- [ListAccessPolicies](#)
- [ListAddons](#)
- [ListAssociatedAccessPolicies](#)
- [ListClusters](#)
- [ListEksAnywhereSubscriptions](#)
- [ListFargateProfiles](#)
- [ListIdentityProviderConfigs](#)
- [ListInsights](#)
- [ListNodegroups](#)
- [ListPodIdentityAssociations](#)
- [ListTagsForResource](#)
- [ListUpdates](#)
- [RegisterCluster](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateAccessEntry](#)
- [UpdateAddon](#)
- [UpdateClusterConfig](#)
- [UpdateClusterVersion](#)
- [UpdateEksAnywhereSubscription](#)

- [UpdateNodegroupConfig](#)
- [UpdateNodegroupVersion](#)
- [UpdatePodIdentityAssociation](#)

AssociateAccessPolicy

Service: Amazon Elastic Kubernetes Service

Associates an access policy and its scope to an access entry. For more information about associating access policies, see [Associating and disassociating access policies to and from access entries](#) in the *Amazon EKS User Guide*.

Request Syntax

```
POST /clusters/name/access-entries/principalArn/access-policies HTTP/1.1
Content-type: application/json

{
  "accessScopenamespacesstring" ],
    "typestring"
  },
  "policyArnstring"
}
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of your cluster.

Required: Yes

principalArn

The Amazon Resource Name (ARN) of the IAM user or role for the AccessEntry that you're associating the access policy to.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[accessScope](#)

The scope for the AccessPolicy. You can scope access policies to an entire cluster or to specific Kubernetes namespaces.

Type: [AccessScope](#) object

Required: Yes

[policyArn](#)

The ARN of the AccessPolicy that you're associating. For a list of ARNs, use `ListAccessPolicies`.

Type: String

Required: Yes

Response Syntax

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

{
  "associatedAccessPolicy": {
    "accessScope": {
      "namespaces": [ "string" ],
      "type": "string"
    },
    "associatedAt": number,
    "modifiedAt": number,
    "policyArn": "string"
  },
  "clusterName": "string",
  "principalArn": "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.

[associatedAccessPolicy](#)

The AccessPolicy and scope associated to the AccessEntry.

Type: [AssociatedAccessPolicy](#) object

[clusterName](#)

The name of your cluster.

Type: String

[principalArn](#)

The ARN of the IAM principal for the AccessEntry.

Type: String

Errors

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

InvalidArgumentException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example associates the AmazonEKSAdminPolicy access policy to an access entry with the IAM role named my-role. The IAM role has the permissions in this policy across all namespaces on the cluster.

Sample Request

```
POST /clusters/my-cluster/access-entries/arn%3Aaws%3Aiam%3A%3A012345678910%3Arole%2Fmy-role/access-policies HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Type: application/json
User-Agent: aws-cli/2.9.0 Python/3.9.11 Windows/10 exe/AMD64 prompt/off command/eks.associate-access-policy
X-Amz-Date: 20230531T134532Z
Authorization: AUTHPARAMS
Content-Length: 112

{
  "policyArn": "arn:aws:eks::aws:cluster-access-policy/AmazonEKSAdminPolicy",
  "accessScope": {
    "type": "cluster"
  }
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 31 May 2023 13:45:47 GMT
Content-Type: application/json
Content-Length: 285
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
Access-Control-Allow-Origin: *
Access-Control-Allow-Headers: *,Authorization,Date,X-Amz-Date,X-Amz-Security-Token,X-Amz-Target,content-type,x-amz-content-sha256,x-amz-user-agent,x-amzn-platform-id,x-amzn-trace-id
x-amz-apigw-id: FylbjHLcPHcFaiA=
Access-Control-Allow-Methods: GET,HEAD,PUT,POST,DELETE,OPTIONS
Access-Control-Expose-Headers: x-amzn-errortype,x-amzn-errormessage,x-amzn-trace-id,x-amzn-requestid,x-amz-apigw-id,date
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "clusterName": "my-cluster

    ,

  "principalArn": "arn:aws:iam::012345678910:role/my-role",
  "associatedAccessPolicy": {
    "policyArn": "arn:aws:eks::aws:cluster-access-policy/AmazonEKSAdminPolicy",
    "accessScope": {
      "type": "cluster",
      "namespaces": []
    },
    "associatedAt": 1685540747.281,
    "modifiedAt": 1685540747.281
  }
}
```

See Also

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

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

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

AssociateEncryptionConfig

Service: Amazon Elastic Kubernetes Service

Associates an encryption configuration to an existing cluster.

Use this API to enable encryption on existing clusters that don't already have encryption enabled. This allows you to implement a defense-in-depth security strategy without migrating applications to new Amazon EKS clusters.

Request Syntax

```
POST /clusters/name/encryption-config/associate HTTP/1.1
Content-type: application/json

{
  "clientRequestTokenstring",
  "encryptionConfigproviderkeyArnstring"
      },
      "resourcesstring" ]
    }
  ]
}
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of your cluster.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[clientRequestToken](#)

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

[encryptionConfig](#)

The configuration you are using for encryption.

Type: Array of [EncryptionConfig](#) objects

Array Members: Maximum number of 1 item.

Required: Yes

Response Syntax

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

```
{
  "update": {
    "createdAt": number,
    "errors": [
      {
        "errorCode": "string",
        "errorMessage": "string",
        "resourceIds": [ "string" ]
      }
    ],
    "id": "string",
    "params": [
      {
        "type": "string",
        "value": "string"
      }
    ],
    "status": "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.

update

An object representing an asynchronous update.

Type: [Update object](#)

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ThrottlingException

The request or operation couldn't be performed because a service is throttling requests.

HTTP Status Code: 429

See Also

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

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

AssociateIdentityProviderConfig

Service: Amazon Elastic Kubernetes Service

Associates an identity provider configuration to a cluster.

If you want to authenticate identities using an identity provider, you can create an identity provider configuration and associate it to your cluster. After configuring authentication to your cluster you can create Kubernetes Role and ClusterRole objects, assign permissions to them, and then bind them to the identities using Kubernetes RoleBinding and ClusterRoleBinding objects. For more information see [Using RBAC Authorization](#) in the Kubernetes documentation.

Request Syntax

```
POST /clusters/name/identity-provider-configs/associate HTTP/1.1
Content-type: application/json
```

```
{
  "clientRequestToken": "string",
  "oidc": {
    "clientId": "string",
    "groupsClaim": "string",
    "groupsPrefix": "string",
    "identityProviderConfigName": "string",
    "issuerUrl": "string",
    "requiredClaims": {
      "string" : "string"
    },
    "usernameClaim": "string",
    "usernamePrefix": "string"
  },
  "tags": {
    "string" : "string"
  }
}
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of your cluster.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[clientRequestToken](#)

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

[oidc](#)

An object representing an OpenID Connect (OIDC) identity provider configuration.

Type: [OidcIdentityProviderConfigRequest](#) object

Required: Yes

[tags](#)

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

Response Syntax

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

{
  "tags": {
```

```
        "string" : "string"
    },
    "update": {
        "createdAt": number,
        "errors": [
            {
                "errorCode": "string",
                "errorMessage": "string",
                "resourceIds": [ "string" ]
            }
        ],
        "id": "string",
        "params": [
            {
                "type": "string",
                "value": "string"
            }
        ],
        "status": "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.

tags

The 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.

Value Length Constraints: Maximum length of 256.

update

An object representing an asynchronous update.

Type: [Update object](#)

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ThrottlingException

The request or operation couldn't be performed because a service is throttling requests.

HTTP Status Code: 429

See Also

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

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

CreateAccessEntry

Service: Amazon Elastic Kubernetes Service

Creates an access entry.

An access entry allows an IAM principal to access your cluster. Access entries can replace the need to maintain entries in the aws-auth ConfigMap for authentication. You have the following options for authorizing an IAM principal to access Kubernetes objects on your cluster: Kubernetes role-based access control (RBAC), Amazon EKS, or both. Kubernetes RBAC authorization requires you to create and manage Kubernetes Role, ClusterRole, RoleBinding, and ClusterRoleBinding objects, in addition to managing access entries. If you use Amazon EKS authorization exclusively, you don't need to create and manage Kubernetes Role, ClusterRole, RoleBinding, and ClusterRoleBinding objects.

For more information about access entries, see [Access entries](#) in the *Amazon EKS User Guide*.

Request Syntax

```
POST /clusters/name/access-entries HTTP/1.1
Content-type: application/json

{
  "clientRequestTokenkubernetesGroupsprincipalArntagstypeusername
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of your cluster.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[clientRequestToken](#)

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

[kubernetesGroups](#)

The value for name that you've specified for kind: Group as a subject in a Kubernetes RoleBinding or ClusterRoleBinding object. Amazon EKS doesn't confirm that the value for name exists in any bindings on your cluster. You can specify one or more names.

Kubernetes authorizes the principalArn of the access entry to access any cluster objects that you've specified in a Kubernetes Role or ClusterRole object that is also specified in a binding's roleRef. For more information about creating Kubernetes RoleBinding, ClusterRoleBinding, Role, or ClusterRole objects, see [Using RBAC Authorization in the Kubernetes documentation](#).

If you want Amazon EKS to authorize the principalArn (instead of, or in addition to Kubernetes authorizing the principalArn), you can associate one or more access policies to the access entry using AssociateAccessPolicy. If you associate any access policies, the principalARN has all permissions assigned in the associated access policies and all permissions in any Kubernetes Role or ClusterRole objects that the group names are bound to.

Type: Array of strings

Required: No

[principalArn](#)

The ARN of the IAM principal for the AccessEntry. You can specify one ARN for each access entry. You can't specify the same ARN in more than one access entry. This value can't be changed after access entry creation.

The valid principals differ depending on the type of the access entry in the type field. For STANDARD access entries, you can use every IAM principal type. For nodes (EC2 (for EKS Auto

Mode), EC2_LINUX, EC2_WINDOWS, FARGATE_LINUX, and HYBRID_LINUX), the only valid ARN is IAM roles. You can't use the STS session principal type with access entries because this is a temporary principal for each session and not a permanent identity that can be assigned permissions.

[IAM best practices](#) recommend using IAM roles with temporary credentials, rather than IAM users with long-term credentials.

Type: String

Required: Yes

[tags](#)

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

[type](#)

The type of the new access entry. Valid values are STANDARD, FARGATE_LINUX, EC2_LINUX, EC2_WINDOWS, EC2 (for EKS Auto Mode), HYBRID_LINUX, and HYPERPOD_LINUX.

If the `principalArn` is for an IAM role that's used for self-managed Amazon EC2 nodes, specify EC2_LINUX or EC2_WINDOWS. Amazon EKS grants the necessary permissions to the node for you. If the `principalArn` is for any other purpose, specify STANDARD. If you don't specify a value, Amazon EKS sets the value to STANDARD. If you have the access mode of the cluster set to API_AND_CONFIG_MAP, it's unnecessary to create access entries for IAM roles used with Fargate profiles or managed Amazon EC2 nodes, because Amazon EKS creates entries in the aws-auth ConfigMap for the roles. You can't change this value once you've created the access entry.

If you set the value to EC2_LINUX or EC2_WINDOWS, you can't specify values for `kubernetesGroups`, or associate an `AccessPolicy` to the access entry.

Type: String

Required: No

username

The username to authenticate to Kubernetes with. We recommend not specifying a username and letting Amazon EKS specify it for you. For more information about the value Amazon EKS specifies for you, or constraints before specifying your own username, see [Creating access entries](#) in the *Amazon EKS User Guide*.

Type: String

Required: No

Response Syntax

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

{
  "accessEntry": {
    "accessEntryArn": "string",
    "clusterName": "string",
    "createdAt": number,
    "kubernetesGroups": [ "string" ],
    "modifiedAt": number,
    "principalArn": "string",
    "tags": {
      "string" : "string"
    },
    "type": "string",
    "username": "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.

[accessEntry](#)

An access entry allows an IAM principal (user or role) to access your cluster. Access entries can replace the need to maintain the aws-auth ConfigMap for authentication. For more information about access entries, see [Access entries](#) in the *Amazon EKS User Guide*.

Type: [AccessEntry](#) object

Errors

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

InvalidArgumentException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example creates an access entry for an IAM role with the name `my-role`. Since a type isn't specified, it's created as type Standard. Since a `username` isn't specified, Amazon EKS sets the value for `username`.

Sample Request

```
POST /clusters/my-cluster/access-entries HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/2.9.0 Python/3.9.11 Windows/10 exe/AMD64 prompt/off command/
eks.create-access-entry
X-Amz-Date: 20230530T193227Z
Authorization: AUTHPARAMS
Content-Length: 120

{
  "principalArn": "arn:aws:iam::012345678910:role/my-role",
  "clientRequestToken": "5a8578bd-b6c1-4624-9e65-d0b70f857835"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 30 May 2023 19:32:43 GMT
Content-Type: application/json
Content-Length: 485
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
Access-Control-Allow-Origin: *
Access-Control-Allow-Headers: *,Authorization,Date,X-Amz-Date,X-Amz-Security-Token,X-Amz-Target,content-type,x-amz-content-sha256,x-amz-user-agent,x-amzn-platform-id,x-amzn-trace-id
x-amz-apigw-id: FwFUDElPHcF4WQ=
Access-Control-Allow-Methods: GET,HEAD,PUT,POST,DELETE,OPTIONS
Access-Control-Expose-Headers: x-amzn-errortype,x-amzn-errormessage,x-amzn-trace-id,x-amzn-requestid,x-amz-apigw-id,date
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "accessEntry": {
    "clusterName": "my-cluster",
    "principalArn": "arn:aws:iam::012345678910:role/my-role",
    "kubernetesGroups": [],
    "accessEntryArn": "arn:aws:eks:us-west-2:012345678910:accessEntry/my-cluster/role/012345678910/my-role/xxx11111-xx1x-xx9115-1x11-xxx111x111x1",
    "createdAt": 1.685475163532E9,
    "modifiedAt": 1.685475163532E9,
    "tags": {},
    "username": "arn:aws:sts::012345678910:assumed-role/my-role/{{SessionName}}",
    "type": "STANDARD"
  }
}
```

See Also

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

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

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

CreateAddon

Service: Amazon Elastic Kubernetes Service

Creates an Amazon EKS add-on.

Amazon EKS add-ons help to automate the provisioning and lifecycle management of common operational software for Amazon EKS clusters. For more information, see [Amazon EKS add-ons](#) in the *Amazon EKS User Guide*.

Request Syntax

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

{
  "addonName": "string",
  "addonVersion": "string",
  "clientRequestToken": "string",
  "configurationValues": "string",
  "podIdentityAssociations": [
    {
      "roleArn": "string",
      "serviceAccount": "string"
    }
  ],
  "resolveConflicts": "string",
  "serviceAccountRoleArn": "string",
  "tags": {
    "string" : "string"
  }
}
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of your cluster.

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^[0-9A-Za-z][A-Za-z0-9\-_]*

Required: Yes

Request Body

The request accepts the following data in JSON format.

addonName

The name of the add-on. The name must match one of the names returned by [DescribeAddonVersions](#).

Type: String

Required: Yes

addonVersion

The version of the add-on. The version must match one of the versions returned by [DescribeAddonVersions](#).

Type: String

Required: No

clientRequestToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

configurationValues

The set of configuration values for the add-on that's created. The values that you provide are validated against the schema returned by [DescribeAddonConfiguration](#).

Type: String

Required: No

podIdentityAssociations

An array of EKS Pod Identity associations to be created. Each association maps a Kubernetes service account to an IAM role.

For more information, see [Attach an IAM Role to an Amazon EKS add-on using EKS Pod Identity](#) in the *Amazon EKS User Guide*.

Type: Array of [AddonPodIdentityAssociations](#) objects

Required: No

resolveConflicts

How to resolve field value conflicts for an Amazon EKS add-on. Conflicts are handled based on the value you choose:

- **None** – If the self-managed version of the add-on is installed on your cluster, Amazon EKS doesn't change the value. Creation of the add-on might fail.
- **Overwrite** – If the self-managed version of the add-on is installed on your cluster and the Amazon EKS default value is different than the existing value, Amazon EKS changes the value to the Amazon EKS default value.
- **Preserve** – This is similar to the NONE option. If the self-managed version of the add-on is installed on your cluster Amazon EKS doesn't change the add-on resource properties. Creation of the add-on might fail if conflicts are detected. This option works differently during the update operation. For more information, see [UpdateAddon](#).

If you don't currently have the self-managed version of the add-on installed on your cluster, the Amazon EKS add-on is installed. Amazon EKS sets all values to default values, regardless of the option that you specify.

Type: String

Valid Values: OVERWRITE | NONE | PRESERVE

Required: No

serviceAccountRoleArn

The Amazon Resource Name (ARN) of an existing IAM role to bind to the add-on's service account. The role must be assigned the IAM permissions required by the add-on. If you don't

specify an existing IAM role, then the add-on uses the permissions assigned to the node IAM role. For more information, see [Amazon EKS node IAM role](#) in the *Amazon EKS User Guide*.

 **Note**

To specify an existing IAM role, you must have an IAM OpenID Connect (OIDC) provider created for your cluster. For more information, see [Enabling IAM roles for service accounts on your cluster](#) in the *Amazon EKS User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

[**tags**](#)

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

Response Syntax

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

{
  "addon": {
    "addonArn": "string",
    "addonName": "string",
    "addonVersion": "string",
    "clusterName": "string",
```

```
"configurationValues": "string",
"createdAthealth": {
    "issues": [
        {
            "code": "string",
            "message": "string",
            "resourceIds": [ "string" ]
        }
    ]
},
"marketplaceInformation": {
    "productId": "string",
    "productUrl": "string"
},
"modifiedAt": "number",
"owner": "string",
"podIdentityAssociations": [ "string" ],
"publisher": "string",
"serviceAccountRoleArn": "string",
"status": "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.

addon

An Amazon EKS add-on. For more information, see [Amazon EKS add-ons](#) in the *Amazon EKS User Guide*.

Type: [Addon](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example creates an add-on named vpc-cni. The add-on uses an existing IAM role named AmazonEKSCNIRole. If the add-on existed prior to creating the Amazon EKS add-on, its settings are overwritten with the Amazon EKS add-on's settings.

Sample Request

```
POST /clusters/my-cluster/addons HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.298 Python/3.6.0 Windows/10 botocore/1.13.34
X-Amz-Date: 20201125T143943Z
Authorization: AUTHPARAMS
Content-Length: 195

{
  "addonName": "vpc-cni",
  "serviceAccountRoleArn": "arn:aws:iam::012345678910:role/AmazonEKSCNIRole",
  "resolveConflicts": "overwrite",
  "clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 25 Nov 2020 14:39:44 GMT
Content-Type: application/json
Content-Length: 474
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: WkXriGcavHcFyqw=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "addon" : {
```

```
"addonName" : "vpc-cni",
"clusterName" : "1-18",
"status" : "CREATING",
"addonVersion" : "v1.7.5-eksbuild.1",
"health" : {
    "issues" : [ ]
},
"addonArn" : "arn:aws:eks:us-west-2:012345678910:addon/my-cluster/vpc-cni/xxxxxxxx-
xxxx-xxxx-xxxx-xxxxxxxxxxxx",
"createdAt" : 1.606315184255E9,
"modifiedAt" : 1.606315184274E9,
"serviceAccountRoleArn" : "arn:aws:iam::012345678910:role/AmazonEKSCNIRole",
"tags" : { }
}
```

See Also

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

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

CreateCluster

Service: Amazon Elastic Kubernetes Service

Creates an Amazon EKS control plane.

The Amazon EKS control plane consists of control plane instances that run the Kubernetes software, such as etcd and the API server. The control plane runs in an account managed by Amazon, and the Kubernetes API is exposed by the Amazon EKS API server endpoint. Each Amazon EKS cluster control plane is single tenant and unique. It runs on its own set of Amazon EC2 instances.

The cluster control plane is provisioned across multiple Availability Zones and fronted by an Elastic Load Balancing Network Load Balancer. Amazon EKS also provisions elastic network interfaces in your VPC subnets to provide connectivity from the control plane instances to the nodes (for example, to support `kubectl exec`, logs, and proxy data flows).

Amazon EKS nodes run in your Amazon account and connect to your cluster's control plane over the Kubernetes API server endpoint and a certificate file that is created for your cluster.

You can use the `endpointPublicAccess` and `endpointPrivateAccess` parameters to enable or disable public and private access to your cluster's Kubernetes API server endpoint. By default, public access is enabled, and private access is disabled. The endpoint domain name and IP address family depends on the value of the `ipFamily` for the cluster. For more information, see [Amazon EKS Cluster Endpoint Access Control](#) in the [Amazon EKS User Guide](#).

You can use the `logging` parameter to enable or disable exporting the Kubernetes control plane logs for your cluster to CloudWatch Logs. By default, cluster control plane logs aren't exported to CloudWatch Logs. For more information, see [Amazon EKS Cluster Control Plane Logs](#) in the [Amazon EKS User Guide](#).

 **Note**

CloudWatch Logs ingestion, archive storage, and data scanning rates apply to exported control plane logs. For more information, see [CloudWatch Pricing](#).

In most cases, it takes several minutes to create a cluster. After you create an Amazon EKS cluster, you must configure your Kubernetes tooling to communicate with the API server and launch nodes

into your cluster. For more information, see [Allowing users to access your cluster](#) and [Launching Amazon EKS nodes](#) in the *Amazon EKS User Guide*.

Request Syntax

```
POST /clusters HTTP/1.1
Content-type: application/json

{
    "accessConfig": {
        "authenticationMode": "string",
        "bootstrapClusterCreatorAdminPermissions": boolean
    },
    "bootstrapSelfManagedAddons": boolean,
    "clientRequestToken": "string",
    "computeConfig": {
        "enabled": boolean,
        "nodePools": [ "string" ],
        "nodeRoleArn": "string"
    },
    "encryptionConfig": [
        {
            "provider": {
                "keyArn": "string"
            },
            "resources": [ "string" ]
        }
    ],
    "kubernetesNetworkConfig": {
        "elasticLoadBalancing": {
            "enabled": boolean
        },
        "ipFamily": "string",
        "serviceIpv4Cidr": "string"
    },
    "logging": {
        "clusterLogging": [
            {
                "enabled": boolean,
                "types": [ "string" ]
            }
        ]
    },
}
```

```
"name": "string",
"outpostConfig": {
    "controlPlaneInstanceType": "string",
    "controlPlanePlacement": {
        "groupName": "string"
    },
    "outpostArns": [ "string" ]
},
"remoteNetworkConfig": {
    "remoteNodeNetworks": [
        {
            "cidrs": [ "string" ]
        }
    ],
    "remotePodNetworks": [
        {
            "cidrs": [ "string" ]
        }
    ]
},
"resourcesVpcConfig": {
    "endpointPrivateAccess": boolean,
    "endpointPublicAccess": boolean,
    "publicAccessCidrs": [ "string" ],
    "securityGroupIds": [ "string" ],
    "subnetIds": [ "string" ]
},
"roleArn": "string",
"storageConfig": {
    "blockStorage": {
        "enabled": boolean
    }
},
"tags": {
    "string" : "string"
},
"upgradePolicy": {
    "supportType": "string"
},
"version": "string",
"zonalShiftConfig": {
    "enabled": boolean
}
```

}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

accessConfig

The access configuration for the cluster.

Type: [CreateAccessConfigRequest](#) object

Required: No

bootstrapSelfManagedAddons

If you set this value to `False` when creating a cluster, the default networking add-ons will not be installed.

The default networking add-ons include `vpc-cni`, `coredns`, and `kube-proxy`.

Use this option when you plan to install third-party alternative add-ons or self-manage the default networking add-ons.

Type: Boolean

Required: No

clientRequestToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

computeConfig

Enable or disable the compute capability of EKS Auto Mode when creating your EKS Auto Mode cluster. If the compute capability is enabled, EKS Auto Mode will create and delete EC2 Managed Instances in your Amazon account

Type: [ComputeConfigRequest](#) object

Required: No

[encryptionConfig](#)

The encryption configuration for the cluster.

Type: Array of [EncryptionConfig](#) objects

Array Members: Maximum number of 1 item.

Required: No

[kubernetesNetworkConfig](#)

The Kubernetes network configuration for the cluster.

Type: [KubernetesNetworkConfigRequest](#) object

Required: No

[logging](#)

Enable or disable exporting the Kubernetes control plane logs for your cluster to CloudWatch Logs . By default, cluster control plane logs aren't exported to CloudWatch Logs . For more information, see [Amazon EKS Cluster control plane logs](#) in the [Amazon EKS User Guide](#) .

 **Note**

CloudWatch Logs ingestion, archive storage, and data scanning rates apply to exported control plane logs. For more information, see [CloudWatch Pricing](#).

Type: [Logging](#) object

Required: No

[name](#)

The unique name to give to your cluster. The name can contain only alphanumeric characters (case-sensitive), hyphens, and underscores. It must start with an alphanumeric character and can't be longer than 100 characters. The name must be unique within the Amazon Web Services Region and Amazon Web Services account that you're creating the cluster in.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^[0-9A-Za-z][A-Za-z0-9\-_]*

Required: Yes

[outpostConfig](#)

An object representing the configuration of your local Amazon EKS cluster on an Amazon Outpost. Before creating a local cluster on an Outpost, review [Local clusters for Amazon EKS on Amazon Outposts](#) in the *Amazon EKS User Guide*. This object isn't available for creating Amazon EKS clusters on the Amazon cloud.

Type: [OutpostConfigRequest](#) object

Required: No

[remoteNetworkConfig](#)

The configuration in the cluster for EKS Hybrid Nodes. You can add, change, or remove this configuration after the cluster is created.

Type: [RemoteNetworkConfigRequest](#) object

Required: No

[resourcesVpcConfig](#)

The VPC configuration that's used by the cluster control plane. Amazon EKS VPC resources have specific requirements to work properly with Kubernetes. For more information, see [Cluster VPC Considerations](#) and [Cluster Security Group Considerations](#) in the *Amazon EKS User Guide*. You must specify at least two subnets. You can specify up to five security groups. However, we recommend that you use a dedicated security group for your cluster control plane.

Type: [VpcConfigRequest](#) object

Required: Yes

[roleArn](#)

The Amazon Resource Name (ARN) of the IAM role that provides permissions for the Kubernetes control plane to make calls to Amazon API operations on your behalf. For more information, see [Amazon EKS Service IAM Role](#) in the *Amazon EKS User Guide*.

Type: String

Required: Yes

storageConfig

Enable or disable the block storage capability of EKS Auto Mode when creating your EKS Auto Mode cluster. If the block storage capability is enabled, EKS Auto Mode will create and delete EBS volumes in your Amazon account.

Type: [StorageConfigRequest object](#)

Required: No

tags

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

upgradePolicy

New clusters, by default, have extended support enabled. You can disable extended support when creating a cluster by setting this value to STANDARD.

Type: [UpgradePolicyRequest object](#)

Required: No

version

The desired Kubernetes version for your cluster. If you don't specify a value here, the default version available in Amazon EKS is used.

Note

The default version might not be the latest version available.

Type: String

Required: No

[zonalShiftConfig](#)

Enable or disable ARC zonal shift for the cluster. If zonal shift is enabled, Amazon configures zonal autoshift for the cluster.

Zonal shift is a feature of Amazon Application Recovery Controller (ARC). ARC zonal shift is designed to be a temporary measure that allows you to move traffic for a resource away from an impaired AZ until the zonal shift expires or you cancel it. You can extend the zonal shift if necessary.

You can start a zonal shift for an Amazon EKS cluster, or you can allow Amazon to do it for you by enabling *zonal autoshift*. This shift updates the flow of east-to-west network traffic in your cluster to only consider network endpoints for Pods running on worker nodes in healthy AZs. Additionally, any ALB or NLB handling ingress traffic for applications in your Amazon EKS cluster will automatically route traffic to targets in the healthy AZs. For more information about zonal shift in EKS, see [Learn about Amazon Application Recovery Controller \(ARC\) Zonal Shift in Amazon EKS](#) in the [Amazon EKS User Guide](#).

Type: [ZonalShiftConfigRequest](#) object

Required: No

Response Syntax

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

{
  "clusteraccessConfigauthenticationModestring",
      "bootstrapClusterCreatorAdminPermissionsboolean
    },
    "arnstring",
    "certificateAuthoritydatastring"
    },
    "clientRequestTokenstring",
```

```
"computeConfig": {  
    "enabled": boolean,  
    "nodePools": [ "string" ],  
    "nodeRoleArn": "string"  
},  
"connectorConfig": {  
    "activationCode": "string",  
    "activationExpiry": number,  
    "activationId": "string",  
    "provider": "string",  
    "roleArn": "string"  
},  
"createdAt": number,  
"encryptionConfig": [  
    {  
        "provider": {  
            "keyArn": "string"  
        },  
        "resources": [ "string" ]  
    }  
],  
"endpoint": "string",  
"health": {  
    "issues": [  
        {  
            "code": "string",  
            "message": "string",  
            "resourceIds": [ "string" ]  
        }  
    ]  
},  
"id": "string",  
"identity": {  
    "oidc": {  
        "issuer": "string"  
    }  
},  
"kubernetesNetworkConfig": {  
    "elasticLoadBalancing": {  
        "enabled": boolean  
    },  
    "ipFamily": "string",  
    "serviceIpv4Cidr": "string",  
    "serviceIpv6Cidr": "string"
```

```
},
"logging": {
    "clusterLogging": [
        {
            "enabled": boolean,
            "types": [ "string" ]
        }
    ]
},
"name": "string",
"outpostConfig": {
    "controlPlaneInstanceType": "string",
    "controlPlanePlacement": {
        "groupName": "string"
    },
    "outpostArns": [ "string" ]
},
"platformVersion": "string",
"remoteNetworkConfig": {
    "remoteNodeNetworks": [
        {
            "cidrs": [ "string" ]
        }
    ],
    "remotePodNetworks": [
        {
            "cidrs": [ "string" ]
        }
    ]
},
"resourcesVpcConfig": {
    "clusterSecurityGroupId": "string",
    "endpointPrivateAccess": boolean,
    "endpointPublicAccess": boolean,
    "publicAccessCidrs": [ "string" ],
    "securityGroupIds": [ "string" ],
    "subnetIds": [ "string" ],
    "vpcId": "string"
},
"roleArn": "string",
"status": "string",
"storageConfig": {
    "blockStorage": {
        "enabled": boolean
    }
}
```

```
        },
    },
    "tags": {
        "string" : "string"
    },
    "upgradePolicy": {
        "supportType": "string"
    },
    "version": "string",
    "zonalShiftConfig": {
        "enabled": 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.

[cluster](#)

The full description of your new cluster.

Type: [Cluster](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

HTTP Status Code: 400

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

HTTP Status Code: 503

UnsupportedAvailabilityZoneException

At least one of your specified cluster subnets is in an Availability Zone that does not support Amazon EKS. The exception output specifies the supported Availability Zones for your account, from which you can choose subnets for your cluster.

HTTP Status Code: 400

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example creates an Amazon EKS cluster named `my-cluster` with endpoint public and private access enabled.

Sample Request

```
POST /clusters HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.120 Python/3.7.0 Darwin/18.2.0 botocore/1.12.110
X-Amz-Date: 20190322T160158Z
Authorization: AUTHPARAMS
Content-Length: 368

{
    "name": "my-cluster",
    "roleArn": "arn:aws:iam::012345678910:role/eksClusterRole",
    "resourcesVpcConfig": {
        "subnetIds": [
            "subnet-xxxxxxxxxxxxxxxxxx",
            "subnet-yyyyyyyyyyyyyyyyyy",
            "subnet-zzzzzzzzzzzzzzz"
        ],
        "securityGroupIds": [
            "sg-xxxxxxxxxxxxxxxxxx"
        ],
        "endpointPublicAccess": true,
        "endpointPrivateAccess": true
    },
    "clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Fri, 22 Mar 2019 16:01:58 GMT
Content-Type: application/json
Content-Length: 682
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: W84GUEIbPHcFW2Q=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive
```

```
{  
  "cluster": {  
    "name": "my-cluster",  
    "arn": "arn:aws:eks:us-west-2:012345678910:cluster/my-cluster",  
    "createdAt": 1573484658.211,  
    "version": "1.14",  
    "roleArn": "arn:aws:iam::012345678910:role/eksClusterRole",  
    "resourcesVpcConfig": {  
      "subnetIds": [  
        "subnet-xxxxxxxxxxxxxxxxxx",  
        "subnet-yyyyyyyyyyyyyyyyy",  
        "subnet-zzzzzzzzzzzzzzz"  
      ],  
      "securityGroupIds": [],  
      "vpcId": "vpc-xxxxxxxxxxxxxxxxxxx",  
      "endpointPublicAccess": true,  
      "endpointPrivateAccess": false  
    },  
    "logging": {  
      "clusterLogging": [  
        {  
          "types": [  
            "api",  
            "audit",  
            "authenticator",  
            "controllerManager",  
            "scheduler"  
          ],  
          "enabled": false  
        }  
      ]  
    },  
    "status": "CREATING",  
    "certificateAuthority": {},  
    "platformVersion": "eks.3",  
    "tags": {}  
  }  
}
```

See Also

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

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

CreateEksAnywhereSubscription

Service: Amazon Elastic Kubernetes Service

Creates an EKS Anywhere subscription. When a subscription is created, it is a contract agreement for the length of the term specified in the request. Licenses that are used to validate support are provisioned in Amazon License Manager and the caller account is granted access to EKS Anywhere Curated Packages.

Request Syntax

```
POST /eks-anywhere-subscriptions HTTP/1.1
Content-type: application/json

{
    "autoRenew": boolean,
    "clientRequestToken": "string",
    "licenseQuantity": number,
    "licenseType": "string",
    "name": "string",
    "tags": {
        "string": "string"
    },
    "term": {
        "duration": number,
        "unit": "string"
    }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

autoRenew

A boolean indicating whether the subscription auto renews at the end of the term.

Type: Boolean

Required: No

[clientRequestToken](#)

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

[licenseQuantity](#)

The number of licenses to purchase with the subscription. Valid values are between 1 and 100. This value can't be changed after creating the subscription.

Type: Integer

Required: No

[licenseType](#)

The license type for all licenses in the subscription. Valid value is CLUSTER. With the CLUSTER license type, each license covers support for a single EKS Anywhere cluster.

Type: String

Valid Values: Cluster

Required: No

[name](#)

The unique name for your subscription. It must be unique in your Amazon account in the Amazon Region you're creating the subscription in. The name can contain only alphanumeric characters (case-sensitive), hyphens, and underscores. It must start with an alphabetic character and can't be longer than 100 characters.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^[0-9A-Za-z][A-Za-z0-9\-_]*

Required: Yes

[tags](#)

The metadata for a subscription to assist with categorization and organization. Each tag consists of a key and an optional value. Subscription tags don't propagate to any other resources associated with the subscription.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

[term](#)

An object representing the term duration and term unit type of your subscription. This determines the term length of your subscription. Valid values are MONTHS for term unit and 12 or 36 for term duration, indicating a 12 month or 36 month subscription. This value cannot be changed after creating the subscription.

Type: [EksAnywhereSubscriptionTerm](#) object

Required: Yes

Response Syntax

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

{
  "subscription": {
    "arn": "string",
    "autoRenew": boolean,
    "createdAt": number,
    "effectiveDate": number,
    "expirationDate": number,
    "id": "string",
    "licenseArns": [ "string" ],
    "licenseQuantity": number,
    "licenses": [
```

```
{  
    "id": "string",  
    "token": "string"  
}  
,  
"licenseType": "string",  
"status": "string",  
"tags": {  
    "string" : "string"  
},  
"term": {  
    "duration": number,  
    "unit": "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.

subscription

The full description of the subscription.

Type: [EksAnywhereSubscription](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

HTTP Status Code: 400

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

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](#)

CreateFargateProfile

Service: Amazon Elastic Kubernetes Service

Creates an Amazon Fargate profile for your Amazon EKS cluster. You must have at least one Fargate profile in a cluster to be able to run pods on Fargate.

The Fargate profile allows an administrator to declare which pods run on Fargate and specify which pods run on which Fargate profile. This declaration is done through the profile's selectors. Each profile can have up to five selectors that contain a namespace and labels. A namespace is required for every selector. The label field consists of multiple optional key-value pairs. Pods that match the selectors are scheduled on Fargate. If a to-be-scheduled pod matches any of the selectors in the Fargate profile, then that pod is run on Fargate.

When you create a Fargate profile, you must specify a pod execution role to use with the pods that are scheduled with the profile. This role is added to the cluster's Kubernetes [Role Based Access Control](#) (RBAC) for authorization so that the kubelet that is running on the Fargate infrastructure can register with your Amazon EKS cluster so that it can appear in your cluster as a node. The pod execution role also provides IAM permissions to the Fargate infrastructure to allow read access to Amazon ECR image repositories. For more information, see [Pod Execution Role in the Amazon EKS User Guide](#).

Fargate profiles are immutable. However, you can create a new updated profile to replace an existing profile and then delete the original after the updated profile has finished creating.

If any Fargate profiles in a cluster are in the DELETING status, you must wait for that Fargate profile to finish deleting before you can create any other profiles in that cluster.

For more information, see [Amazon Fargate profile](#) in the *Amazon EKS User Guide*.

Request Syntax

```
POST /clusters/name/fargate-profiles HTTP/1.1
Content-type: application/json
```

```
{
  "clientRequestToken": "string",
  "fargateProfileName": "string",
  "podExecutionRoleArn": "string",
  "selectors": [
    {
      "labels": {
```

```
        "string" : "string"
    },
    "namespace": "string"
}
],
"subnets": [ "string" ],
"tags": {
    "string" : "string"
}
}
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[clientRequestToken](#)

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

[fargateProfileName](#)

The name of the Fargate profile.

Type: String

Required: Yes

[podExecutionRoleArn](#)

The Amazon Resource Name (ARN) of the Pod execution role to use for a Pod that matches the selectors in the Fargate profile. The Pod execution role allows Fargate infrastructure to register

with your cluster as a node, and it provides read access to Amazon ECR image repositories. For more information, see [Pod execution role](#) in the *Amazon EKS User Guide*.

Type: String

Required: Yes

selectors

The selectors to match for a Pod to use this Fargate profile. Each selector must have an associated Kubernetes namespace. Optionally, you can also specify labels for a namespace. You may specify up to five selectors in a Fargate profile.

Type: Array of [FargateProfileSelector](#) objects

Required: No

subnets

The IDs of subnets to launch a Pod into. A Pod running on Fargate isn't assigned a public IP address, so only private subnets (with no direct route to an Internet Gateway) are accepted for this parameter.

Type: Array of strings

Required: No

tags

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

Response Syntax

HTTP/1.1 200

Content-type: application/json

```
{  
  "fargateProfile": {  
    "clusterName": "string",  
    "createdAt": number,  
    "fargateProfileArn": "string",  
    "fargateProfileName": "string",  
    "health": {  
      "issues": [  
        {  
          "code": "string",  
          "message": "string",  
          "resourceIds": [ "string" ]  
        }  
      ]  
    },  
    "podExecutionRoleArn": "string",  
    "selectors": [  
      {  
        "labels": {  
          "string" : "string"  
        },  
        "namespace": "string"  
      }  
    ],  
    "status": "string",  
    "subnets": [ "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.

fargateProfile

The full description of your new Fargate profile.

Type: [FargateProfile](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

HTTP Status Code: 400

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

UnsupportedAvailabilityZoneException

At least one of your specified cluster subnets is in an Availability Zone that does not support Amazon EKS. The exception output specifies the supported Availability Zones for your account, from which you can choose subnets for your cluster.

HTTP Status Code: 400

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example creates a Fargate profile called default-with-infrastructure-label in the fargate cluster. Any Pod launched in the default namespace with the Kubernetes label "infrastructure": "fargate" is run on Fargate.

Sample Request

```
POST /clusters/fargate/fargate-profiles HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.284 Python/3.7.5 Darwin/18.7.0 botocore/1.13.20
X-Amz-Date: 20191120T202529Z
Authorization: AUTHPARAMS
Content-Length: 355

{
  "fargateProfileName": "default-with-infrastructure-label",
  "podExecutionRoleArn": "arn:aws:iam::012345678910:role/AmazonEKSPodExecutionRole",
  "subnets": [
    "subnet-xxxxxxxxxxxxxxxxx",
    "subnet-yyyyyyyyyyyyyyyy"
  ],
  "selectors": [
    {
      "namespace": "default",
      "labels": {
        "infrastructure": "fargate"
      }
    }
  ]
}
```

```
"clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"  
}
```

Sample Response

```
HTTP/1.1 200 OK  
Date: Wed, 20 Nov 2019 20:37:30 GMT  
Content-Type: application/json  
Content-Length: 610  
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx  
x-amz-apigw-id: DeaRjFWPvHcFcXw=  
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx  
Connection: keep-alive  
  
{  
    "fargateProfile": {  
        "fargateProfileName": "compute-label",  
        "fargateProfileArn": "arn:aws:eks:us-west-2:012345678910:fargateprofile/fargate/  
compute-label/xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",  
        "clusterName": "fargate",  
        "createdAt": 1574206849.791,  
        "podExecutionRoleArn": "arn:aws:iam::012345678910:role/AmazonEKSPodExecutionRole",  
        "subnets": [  
            "subnet-xxxxxxxxxxxxxxxxxx",  
            "subnet-yyyyyyyyyyyyyyyyy"  
        ],  
        "selectors": [  
            {  
                "namespace": "kube-system",  
                "labels": {  
                    "compute": "fargate"  
                }  
            }  
        ],  
        "status": "CREATING",  
        "tags": {}  
    }  
}
```

See Also

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

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

CreateNodegroup

Service: Amazon Elastic Kubernetes Service

Creates a managed node group for an Amazon EKS cluster.

You can only create a node group for your cluster that is equal to the current Kubernetes version for the cluster. All node groups are created with the latest AMI release version for the respective minor Kubernetes version of the cluster, unless you deploy a custom AMI using a launch template.

For later updates, you will only be able to update a node group using a launch template only if it was originally deployed with a launch template. Additionally, the launch template ID or name must match what was used when the node group was created. You can update the launch template version with necessary changes. For more information about using launch templates, see [Customizing managed nodes with launch templates](#).

An Amazon EKS managed node group is an Amazon EC2 Auto Scaling group and associated Amazon EC2 instances that are managed by Amazon for an Amazon EKS cluster. For more information, see [Managed node groups](#) in the *Amazon EKS User Guide*.

 **Note**

Windows AMI types are only supported for commercial Amazon Web Services Regions that support Windows on Amazon EKS.

Request Syntax

```
POST /clusters/name/node-groups HTTP/1.1
Content-type: application/json
```

```
{
  "amiTypestring",
  "capacityTypestring",
  "clientRequestTokenstring",
  "diskSizenumber,
  "instanceTypesstring " ],
  "labelsstring : "string"
  },
  "launchTemplateidstring"}
```

```
"name": "string",
"version": "string"
},
"nodegroupName": "string",
"nodeRepairConfig": {
    "enabled": boolean
},
"nodeRole": "string",
"releaseVersion": "string",
"remoteAccess": {
    "ec2SshKey": "string",
    "sourceSecurityGroups": [ "string" ]
},
"scalingConfig": {
    "desiredSize": number,
    "maxSize": number,
    "minSize": number
},
"subnets": [ "string" ],
"tags": {
    "string" : "string"
},
"taints": [
    {
        "effect": "string",
        "key": "string",
        "value": "string"
    }
],
"updateConfig": {
    "maxUnavailable": number,
    "maxUnavailablePercentage": number,
    "updateStrategy": "string"
},
"version": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

Request Body

The request accepts the following data in JSON format.

amiType

The AMI type for your node group. If you specify launchTemplate, and your launch template uses a custom AMI, then don't specify amiType, or the node group deployment will fail. If your launch template uses a Windows custom AMI, then add eks:kube-proxy-windows to your Windows nodes rolearn in the aws-auth ConfigMap. For more information about using launch templates with Amazon EKS, see [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

Type: String

Valid Values: AL2_x86_64 | AL2_x86_64_GPU | AL2_ARM_64 | CUSTOM | BOTTLEROCKET_ARM_64 | BOTTLEROCKET_x86_64 | BOTTLEROCKET_ARM_64_FIPS | BOTTLEROCKET_x86_64_FIPS | BOTTLEROCKET_ARM_64_NVIDIA | BOTTLEROCKET_x86_64_NVIDIA | WINDOWS_CORE_2019_x86_64 | WINDOWS_FULL_2019_x86_64 | WINDOWS_CORE_2022_x86_64 | WINDOWS_FULL_2022_x86_64 | AL2023_x86_64_STANDARD | AL2023_ARM_64_STANDARD | AL2023_x86_64_NEURON | AL2023_x86_64_NVIDIA | AL2023_ARM_64_NVIDIA

Required: No

capacityType

The capacity type for your node group.

Type: String

Valid Values: ON_DEMAND | SPOT | CAPACITY_BLOCK

Required: No

clientRequestToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

diskSize

The root device disk size (in GiB) for your node group instances. The default disk size is 20 GiB for Linux and Bottlerocket. The default disk size is 50 GiB for Windows. If you specify `launchTemplate`, then don't specify `diskSize`, or the node group deployment will fail. For more information about using launch templates with Amazon EKS, see [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

Type: Integer

Required: No

instanceTypes

Specify the instance types for a node group. If you specify a GPU instance type, make sure to also specify an applicable GPU AMI type with the `amiType` parameter. If you specify `launchTemplate`, then you can specify zero or one instance type in your launch template or you can specify 0-20 instance types for `instanceTypes`. If however, you specify an instance type in your launch template *and* specify any `instanceTypes`, the node group deployment will fail. If you don't specify an instance type in a launch template or for `instanceTypes`, then `t3.medium` is used, by default. If you specify `Spot` for `capacityType`, then we recommend specifying multiple values for `instanceTypes`. For more information, see [Managed node group capacity types](#) and [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

Type: Array of strings

Required: No

labels

The Kubernetes `labels` to apply to the nodes in the node group when they are created.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 63.

Value Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

[launchTemplate](#)

An object representing a node group's launch template specification. When using this object, don't directly specify `instanceTypes`, `diskSize`, or `remoteAccess`. You cannot later specify a different launch template ID or name than what was used to create the node group.

Make sure that the launch template meets the requirements in `launchTemplateSpecification`. Also refer to [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

Type: [LaunchTemplateSpecification](#) object

Required: No

[nodegroupName](#)

The unique name to give your node group.

Type: String

Required: Yes

[nodeRepairConfig](#)

The node auto repair configuration for the node group.

Type: [NodeRepairConfig](#) object

Required: No

[nodeRole](#)

The Amazon Resource Name (ARN) of the IAM role to associate with your node group. The Amazon EKS worker node kubelet daemon makes calls to Amazon APIs on your behalf. Nodes receive permissions for these API calls through an IAM instance profile and associated policies. Before you can launch nodes and register them into a cluster, you must create an IAM role for those nodes to use when they are launched. For more information, see [Amazon EKS node IAM role](#) in the *Amazon EKS User Guide*. If you specify `launchTemplate`, then don't specify [IamInstanceProfile](#) in your launch template, or the node group deployment will fail. For more information about using launch templates with Amazon EKS, see [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

Type: String

Required: Yes

releaseVersion

The AMI version of the Amazon EKS optimized AMI to use with your node group. By default, the latest available AMI version for the node group's current Kubernetes version is used. For information about Linux versions, see [Amazon EKS optimized Amazon Linux AMI versions](#) in the *Amazon EKS User Guide*. Amazon EKS managed node groups support the November 2022 and later releases of the Windows AMIs. For information about Windows versions, see [Amazon EKS optimized Windows AMI versions](#) in the *Amazon EKS User Guide*.

If you specify `launchTemplate`, and your launch template uses a custom AMI, then don't specify `releaseVersion`, or the node group deployment will fail. For more information about using launch templates with Amazon EKS, see [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

Type: String

Required: No

remoteAccess

The remote access configuration to use with your node group. For Linux, the protocol is SSH. For Windows, the protocol is RDP. If you specify `launchTemplate`, then don't specify `remoteAccess`, or the node group deployment will fail. For more information about using launch templates with Amazon EKS, see [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

Type: [RemoteAccessConfig](#) object

Required: No

scalingConfig

The scaling configuration details for the Auto Scaling group that is created for your node group.

Type: [NodegroupScalingConfig](#) object

Required: No

subnets

The subnets to use for the Auto Scaling group that is created for your node group. If you specify `launchTemplate`, then don't specify `SubnetId` in your launch template, or the node group deployment will fail. For more information about using launch templates with Amazon EKS, see [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

Type: Array of strings

Required: Yes

tags

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

taints

The Kubernetes taints to be applied to the nodes in the node group. For more information, see [Node taints on managed node groups](#).

Type: Array of [Taint](#) objects

Required: No

updateConfig

The node group update configuration.

Type: [NodegroupUpdateConfig](#) object

Required: No

version

The Kubernetes version to use for your managed nodes. By default, the Kubernetes version of the cluster is used, and this is the only accepted specified value. If you specify launchTemplate, and your launch template uses a custom AMI, then don't specify version, or the node group deployment will fail. For more information about using launch templates with Amazon EKS, see [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

Type: String

Required: No

Response Syntax

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

{
  "nodegroup": {
    "amiType": "string",
    "capacityType": "string",
    "clusterName": "string",
    "createdAt": number,
    "diskSize": number,
    "health": {
      "issues": [
        {
          "code": "string",
          "message": "string",
          "resourceIds": [ "string" ]
        }
      ]
    },
    "instanceTypes": [ "string" ],
    "labels": {
      "string" : "string"
    },
    "launchTemplate": {
      "id": "string",
      "name": "string",
      "version": "string"
    },
    "modifiedAt": number,
    "nodegroupArn": "string",
    "nodegroupName": "string",
    "nodeRepairConfig": {
      "enabled": boolean
    },
    "nodeRole": "string",
    "releaseVersion": "string",
    "remoteAccess": {
      "ec2SshKey": "string",
      "sourceSecurityGroups": [ "string" ]
    }
  }
}
```

```
},
"resources": {
    "autoScalingGroups": [
        {
            "name": "string"
        }
    ],
    "remoteAccessSecurityGroup": "string"
},
"scalingConfig": {
    "desiredSize": number,
    "maxSize": number,
    "minSize": number
},
"status": "string",
"subnets": [ "string" ],
"tags": {
    "string": "string"
},
"taints": [
    {
        "effect": "string",
        "key": "string",
        "value": "string"
    }
],
"updateConfig": {
    "maxUnavailable": number,
    "maxUnavailablePercentage": number,
    "updateStrategy": "string"
},
"version": "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.

[nodegroup](#)

The full description of your new node group.

Type: [Nodegroup](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

HTTP Status Code: 400

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example 1

This example creates a managed node group without a launch template that uses an Amazon EKS optimized AMI with GPU support on p2.xlarge instances.

Sample Request

```
POST /clusters/my-cluster/node-groups HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.298 Python/3.6.0 Windows/10 botocore/1.13.34
X-Amz-Date: 20200812T151423Z
Authorization: AUTHPARAMS
Content-Length: 454

{
  "nodegroupName": "my-nodegroup-gpu",
  "scalingConfig": {
    "minSize": 2,
    "maxSize": 2,
    "desiredSize": 2
  },
  "subnets": ["subnet-nnnnnnnnnnnnnnnn", "subnet-xxxxxxxxxxxxxx", "subnet-yyyyyyyyyyyyyy", "subnet-zzzzzzzzzzzzzzz"]
}
```

```
"instanceTypes": ["p2.xlarge"],
"amiType": "AL2_x86_64_GPU",
"remoteAccess": {
    "ec2SshKey": "id_rsa"
},
"nodeRole": "arn:aws:iam::012345678910:role/NodeInstanceRole",
"clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 12 Aug 2020 15:14:24 GMT
Content-Type: application/json
Content-Length: 951
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: DAc5BGsWvHcF_bw=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "nodegroup": {
    "nodegroupName": "my-nodegroup-gpu2",
    "nodegroupArn": "arn:aws:eks:us-west-2:012345678910:nodegroup/my-cluster/my-nodegroup-gpu2/xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
    "clusterName": "lt-testing",
    "version": "1.17",
    "releaseVersion": "1.17.9-20200804",
    "createdAt": 1.597245264844E9,
    "modifiedAt": 1.597245264844E9,
    "status": "CREATING",
    "scalingConfig": {
      "minSize": 2,
      "maxSize": 2,
      "desiredSize": 2
    },
    "instanceTypes": ["p2.xlarge"],
    "subnets": ["subnet-nnnnnnnnnnnnnnnn", "subnet-xxxxxxxxxxxxxx", "subnet-yyyyyyyyyyyyyy", "subnet-zzzzzzzzzzzzzzz"],
    "remoteAccess": {
      "ec2SshKey": "id_rsa",
      "sourceSecurityGroups": null
    }
  }
}
```

```
"amiType": "AL2_x86_64_GPU",
"nodeRole": "arn:aws:iam::012345678910:role/NodeInstanceRole",
"labels": null,
"resources": null,
"diskSize": 20,
"health": {
    "issues": []
},
"launchTemplate": null,
"tags": {}
}
```

Example 2

This example creates a managed node group with an Amazon EKS optimized AMI using version 2 of a launch template named my-launch-template.

Sample Request

```
POST /clusters/lt-testing/node-groups HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.298 Python/3.6.0 Windows/10 botocore/1.13.34
X-Amz-Date: 20200812T135927Z
Authorization: AUTHPARAMS
Content-Length: 433

{
    "nodegroupName": "my-nodegroup",
    "scalingConfig": {
        "minSize": 2,
        "maxSize": 2,
        "desiredSize": 2
    },
    "subnets": ["subnet-nnnnnnnnnnnnnnnnn", "subnet-xxxxxxxxxxxxxx", "subnet-yyyyyyyyyyyyyy", "subnet-zzzzzzzzzzzzzzz"],
    "amiType": "AL2_x86_64",
    "nodeRole": "arn:aws:iam::012345678910:role/NodeInstanceRole",
    "launchTemplate": {
        "name": "my-launch-template",
        "version": "2"
    },
}
```

```
"clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"  
}
```

Sample Response

```
HTTP/1.1 200 OK  
Date: Wed, 12 Aug 2020 13:59:32 GMT  
Content-Type: application/json  
Content-Length: 1028  
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx  
x-amz-apigw-id: DAc5BGsWvHcF_bw=  
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx  
Connection: keep-alive  
  
{  
  "nodegroup": {  
    "nodegroupName": "my-nodegroup",  
    "nodegroupArn": "arn:aws:eks:us-west-2:012345678910:nodegroup/my-cluster/my-nodegroup/xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",  
    "clusterName": "my-cluster",  
    "version": "1.17",  
    "releaseVersion": "1.17.9-20200804",  
    "createdAt": 1.597240771904E9,  
    "modifiedAt": 1.597240771904E9,  
    "status": "CREATING",  
    "scalingConfig": {  
      "minSize": 2,  
      "maxSize": 2,  
      "desiredSize": 2  
    },  
    "instanceTypes": null,  
    "subnets": ["subnet-nnnnnnnnnnnnnnnnn", "subnet-xxxxxxxxxxxxxxx", "subnet-yyyyyyyyyyyyyy", "subnet-zzzzzzzzzzzzzzz"],  
    "remoteAccess": null,  
    "amiType": "AL2_x86_64",  
    "nodeRole": "arn:aws:iam::012345678910:role/NodeInstanceRole",  
    "labels": null,  
    "resources": null,  
    "diskSize": null,  
    "health": {  
      "issues": []  
    },  
    "launchTemplate": {
```

```
"name": "my-template",
"version": "2",
"id": "lt-xxxxxxxxxxxxxxxxxx"
},
"tags": {}
}
```

See Also

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

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

CreatePodIdentityAssociation

Service: Amazon Elastic Kubernetes Service

Creates an EKS Pod Identity association between a service account in an Amazon EKS cluster and an IAM role with *EKS Pod Identity*. Use EKS Pod Identity to give temporary IAM credentials to Pods and the credentials are rotated automatically.

Amazon EKS Pod Identity associations provide the ability to manage credentials for your applications, similar to the way that Amazon EC2 instance profiles provide credentials to Amazon EC2 instances.

If a Pod uses a service account that has an association, Amazon EKS sets environment variables in the containers of the Pod. The environment variables configure the Amazon SDKs, including the Amazon Command Line Interface, to use the EKS Pod Identity credentials.

EKS Pod Identity is a simpler method than *IAM roles for service accounts*, as this method doesn't use OIDC identity providers. Additionally, you can configure a role for EKS Pod Identity once, and reuse it across clusters.

Similar to Amazon IAM behavior, EKS Pod Identity associations are eventually consistent, and may take several seconds to be effective after the initial API call returns successfully. You must design your applications to account for these potential delays. We recommend that you don't include association create/updates in the critical, high-availability code paths of your application. Instead, make changes in a separate initialization or setup routine that you run less frequently.

You can set a *target IAM role* in the same or a different account for advanced scenarios. With a target role, EKS Pod Identity automatically performs two role assumptions in sequence: first assuming the role in the association that is in this account, then using those credentials to assume the target IAM role. This process provides your Pod with temporary credentials that have the permissions defined in the target role, allowing secure access to resources in another Amazon Web Services account.

Request Syntax

```
POST /clusters/name/pod-identity-associations HTTP/1.1
Content-type: application/json

{
  "clientRequestTokenstring",
  "disableSessionTagsboolean,
```

```
"namespace": "string",
"roleArn": "string",
"serviceAccount": "string",
"tags": {
    "string" : "string"
},
"targetRoleArn": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of the cluster to create the EKS Pod Identity association in.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[clientRequestToken](#)

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

[disableSessionTags](#)

Disable the automatic sessions tags that are appended by EKS Pod Identity.

EKS Pod Identity adds a pre-defined set of session tags when it assumes the role. You can use these tags to author a single role that can work across resources by allowing access to Amazon resources based on matching tags. By default, EKS Pod Identity attaches six tags, including tags for cluster name, namespace, and service account name. For the list of tags added by EKS Pod Identity, see [List of session tags added by EKS Pod Identity](#) in the *Amazon EKS User Guide*.

Amazon compresses inline session policies, managed policy ARNs, and session tags into a packed binary format that has a separate limit. If you receive a `PackedPolicyTooLarge` error

indicating the packed binary format has exceeded the size limit, you can attempt to reduce the size by disabling the session tags added by EKS Pod Identity.

Type: Boolean

Required: No

namespace

The name of the Kubernetes namespace inside the cluster to create the EKS Pod Identity association in. The service account and the Pods that use the service account must be in this namespace.

Type: String

Required: Yes

roleArn

The Amazon Resource Name (ARN) of the IAM role to associate with the service account. The EKS Pod Identity agent manages credentials to assume this role for applications in the containers in the Pods that use this service account.

Type: String

Required: Yes

serviceAccount

The name of the Kubernetes service account inside the cluster to associate the IAM credentials with.

Type: String

Required: Yes

tags

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

The following basic restrictions apply to tags:

- Maximum number of tags per resource – 50
- For each resource, each tag key must be unique, and each tag key can have only one value.

- Maximum key length – 128 Unicode characters in UTF-8
- Maximum value length – 256 Unicode characters in UTF-8
- If your tagging schema is used across multiple services and resources, remember that other services may have restrictions on allowed characters. Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following characters: + - = . _ : / @.
- Tag keys and values are case-sensitive.
- Do not use aws :, AWS :, or any upper or lowercase combination of such as a prefix for either keys or values as it is reserved for Amazon use. You cannot edit or delete tag keys or values with this prefix. Tags with this prefix do not count against your tags per resource limit.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

targetRoleArn

The Amazon Resource Name (ARN) of the target IAM role to associate with the service account. This role is assumed by using the EKS Pod Identity association role, then the credentials for this role are injected into the Pod.

When you run applications on Amazon EKS, your application might need to access Amazon resources from a different role that exists in the same or different Amazon Web Services account. For example, your application running in “Account A” might need to access resources, such as Amazon S3 buckets in “Account B” or within “Account A” itself. You can create a association to access Amazon resources in “Account B” by creating two IAM roles: a role in “Account A” and a role in “Account B” (which can be the same or different account), each with the necessary trust and permission policies. After you provide these roles in the *IAM role* and *Target IAM role* fields, EKS will perform role chaining to ensure your application gets the required permissions. This means Role A will assume Role B, allowing your Pods to securely access resources like S3 buckets in the target account.

Type: String

Required: No

Response Syntax

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

{
    "association": {
        "associationArn": "string",
        "associationId": "string",
        "clusterName": "string",
        "createdAt": number,
        "disableSessionTags": boolean,
        "externalId": "string",
        "modifiedAt": number,
        "namespace": "string",
        "ownerArn": "string",
        "roleArn": "string",
        "serviceAccount": "string",
        "tags": {
            "string" : "string"
        },
        "targetRoleArn": "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.

association

The full description of your new association.

The description includes an ID for the association. Use the ID of the association in further actions to manage the association.

Type: [PodIdentityAssociation](#) object

Errors

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

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

See Also

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

- [Amazon Command Line Interface](#)

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

DeleteAccessEntry

Service: Amazon Elastic Kubernetes Service

Deletes an access entry.

Deleting an access entry of a type other than Standard can cause your cluster to function improperly. If you delete an access entry in error, you can recreate it.

Request Syntax

```
DELETE /clusters/name/access-entries/principalArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[principalArn](#)

The ARN of the IAM principal for the AccessEntry.

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

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

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example deletes an access entry.

Sample Request

```
DELETE /clusters/my-cluster/access-entries/arn%3Aaws%3Aiam%3A%3A012345678910%3Arole
%2Fmy-role HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
```

```
User-Agent: aws-cli/2.9.0 Python/3.9.11 Windows/10 exe/AMD64 prompt/off command/  
eks.delete-access-entry  
X-Amz-Date: 20230531T160655Z  
Authorization: AUTHPARAMS  
Content-Length: 0
```

Sample Response

```
HTTP/1.1 200 OK  
Date: Wed, 31 May 2023 16:06:56 GMT  
Content-Type: application/json  
Content-Length: 2  
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx  
Access-Control-Allow-Origin: *  
Access-Control-Allow-Headers: *,Authorization,Date,X-Amz-Date,X-Amz-Security-Token,X-Amz-Target,content-type,x-amz-content-sha256,x-amz-user-agent,x-amzn-platform-id,x-amzn-trace-id  
x-amz-apigw-id: Fy6JBE3tvHcFvwA=  
Access-Control-Allow-Methods: GET,HEAD,PUT,POST,DELETE,OPTIONS  
Access-Control-Expose-Headers: x-amzn-errortype,x-amzn-errormessage,x-amzn-trace-id,x-amzn-requestid,x-amz-apigw-id,date  
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx  
Connection: keep-alive  
  
{}
```

See Also

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

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

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

DeleteAddon

Service: Amazon Elastic Kubernetes Service

Deletes an Amazon EKS add-on.

When you remove an add-on, it's deleted from the cluster. You can always manually start an add-on on the cluster using the Kubernetes API.

Request Syntax

```
DELETE /clusters/name/addons/addonName?preserve=preserve HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[addonName](#)

The name of the add-on. The name must match one of the names returned by [ListAddons](#).

Required: Yes

[name](#)

The name of your cluster.

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^[0-9A-Za-z][A-Za-z0-9\-_]*

Required: Yes

[preserve](#)

Specifying this option preserves the add-on software on your cluster but Amazon EKS stops managing any settings for the add-on. If an IAM account is associated with the add-on, it isn't removed.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "addon": {
    "addonArn": "string",
    "addonName": "string",
    "addonVersion": "string",
    "clusterName": "string",
    "configurationValues": "string",
    "createdAt": number,
    "health": {
      "issues": [
        {
          "code": "string",
          "message": "string",
          "resourceIds": [ "string" ]
        }
      ]
    },
    "marketplaceInformation": {
      "productId": "string",
      "productUrl": "string"
    },
    "modifiedAt": number,
    "owner": "string",
    "podIdentityAssociations": [ "string" ],
    "publisher": "string",
    "serviceAccountRoleArn": "string",
    "status": "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.

[addon](#)

An Amazon EKS add-on. For more information, see [Amazon EKS add-ons](#) in the *Amazon EKS User Guide*.

Type: [Addon](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example deletes an add-on named vpc-cni.

Sample Request

```
DELETE /clusters/1-18/addons/vpc-cni HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.298 Python/3.6.0 Windows/10 botocore/1.13.34
X-Amz-Date: 20201125T145907Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 25 Nov 2020 14:59:08 GMT
Content-Type: application/json
Content-Length: 474
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: WkahaEGlvHcF1zA=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "addon" : {
    "addonName" : "vpc-cni",
    "clusterName" : "1-18",
    "status" : "DELETING",
    "addonVersion" : "v1.7.5-eksbuild.1",
```

```
"health" : {  
    "issues" : [ ]  
,  
    "addonArn" : "arn:aws:eks:us-west-2:012345678910:addon/1-18/vpc-cni/xxxxxxxx-xxxx-  
xxxx-xxxx-xxxxxxxxxxxx",  
    "createdAt" : 1.606315184255E9,  
    "modifiedAt" : 1.606316348223E9,  
    "serviceAccountRoleArn" : "arn:aws:iam::012345678910:role/AmazonEKSCNIRole",  
    "tags" : { }  
}  
}
```

See Also

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

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

DeleteCluster

Service: Amazon Elastic Kubernetes Service

Deletes an Amazon EKS cluster control plane.

If you have active services in your cluster that are associated with a load balancer, you must delete those services before deleting the cluster so that the load balancers are deleted properly. Otherwise, you can have orphaned resources in your VPC that prevent you from being able to delete the VPC. For more information, see [Deleting a cluster](#) in the *Amazon EKS User Guide*.

If you have managed node groups or Fargate profiles attached to the cluster, you must delete them first. For more information, see [DeleteNodegroup](#) and [DeleteFargateProfile](#).

Request Syntax

```
DELETE /clusters/name HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of the cluster to delete.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "clusteraccessConfigauthenticationModestring",
      "bootstrapClusterCreatorAdminPermissionsboolean
    },
  }
}
```

```
"arn": "string",
"certificateAuthority": {
    "data": "string"
},
"clientRequestToken": "string",
"computeConfig": {
    "enabled": boolean,
    "nodePools": [ "string" ],
    "nodeRoleArn": "string"
},
"connectorConfig": {
    "activationCode": "string",
    "activationExpiry": number,
    "activationId": "string",
    "provider": "string",
    "roleArn": "string"
},
"createdAt": number,
"encryptionConfig": [
    {
        "provider": {
            "keyArn": "string"
        },
        "resources": [ "string" ]
    }
],
"endpoint": "string",
"health": {
    "issues": [
        {
            "code": "string",
            "message": "string",
            "resourceIds": [ "string" ]
        }
    ]
},
"id": "string",
"identity": {
    "oidc": {
        "issuer": "string"
    }
},
"kubernetesNetworkConfig": {
    "elasticLoadBalancing": {
```

```
        "enabled": boolean
    },
    "ipFamily": "string",
    "serviceIpv4Cidr": "string",
    "serviceIpv6Cidr": "string"
},
"logging": {
    "clusterLogging": [
        {
            "enabled": boolean,
            "types": [ "string" ]
        }
    ]
},
"name": "string",
"outpostConfig": {
    "controlPlaneInstanceType": "string",
    "controlPlanePlacement": {
        "groupName": "string"
    },
    "outpostArns": [ "string" ]
},
"platformVersion": "string",
"remoteNetworkConfig": {
    "remoteNodeNetworks": [
        {
            "cidrs": [ "string" ]
        }
    ],
    "remotePodNetworks": [
        {
            "cidrs": [ "string" ]
        }
    ]
},
"resourcesVpcConfig": {
    "clusterSecurityGroupId": "string",
    "endpointPrivateAccess": boolean,
    "endpointPublicAccess": boolean,
    "publicAccessCidrs": [ "string" ],
    "securityGroupIds": [ "string" ],
    "subnetIds": [ "string" ],
    "vpcId": "string"
}
},
```

```
"roleArn": "string",  
"status": "string",  
"storageConfig": {  
    "blockStorage": {  
        "enabled": boolean  
    }  
},  
"tags": {  
    "string": "string"  
},  
"upgradePolicy": {  
    "supportType": "string"  
},  
"version": "string",  
"zonalShiftConfig": {  
    "enabled": 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.

cluster

The full description of the cluster to delete.

Type: [Cluster](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example deletes a cluster called my-cluster.

Sample Request

```
DELETE /clusters/my-cluster HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.15.0 Python/3.6.5 Darwin/16.7.0 botocore/1.10.0
X-Amz-Date: 20180531T231840Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 31 May 2018 23:18:41 GMT
Content-Type: application/json
Content-Length: 1895
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: HxlgjH_rPHcF7ag=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "cluster": {
    "name": "dev",
    "arn": "arn:aws:eks:us-west-2:012345678910:cluster/my-cluster",
    "createdAt": 1573244832.203,
    "version": "1.14",
    "endpoint": "https://A0DCCD80A04F01705DD065655C30CC3D.y14.us-
west-2.eks.amazonaws.com",
    "roleArn": "arn:aws:iam::012345678910:role/eksClusterRole",
    "resourcesVpcConfig": {
      "subnetIds": [
        "subnet-xxxxxxxxxxxxxxxxxx",
        "subnet-yyyyyyyyyyyyyyyyy",
        "subnet-zzzzzzzzzzzzzzz"
      ],
      "securityGroupIds": [
        "sg-xxxxxxxxxxxxxxxxxx"
      ],
      "clusterSecurityGroupId": "sg-yyyyyyyyyyyyyyyyyy",
      "vpcId": "vpc-xxxxxxxxxxxxxxxxxx",
      "endpointPublicAccess": true,
      "endpointPrivateAccess": false
    },
  }
}
```

```
"logging": {  
    "clusterLogging": [  
        {  
            "types": [  
                "api",  
                "audit",  
                "authenticator",  
                "controllerManager",  
                "scheduler"  
            ],  
            "enabled": false  
        }  
    ],  
},  
"identity": {  
    "oidc": {  
        "issuer": "https://oidc.eks.us-west-2.amazonaws.com/id/  
XXXXXXXXXXXXXX097E4AC3A07B6B79B9C"  
    }  
},  
"status": "DELETING",  
"certificateAuthority": {  
    "data": "HERE_BE_SOME_CERT_DATA==="  
},  
"platformVersion": "eks.3",  
"tags": {}  
}  
}
```

See Also

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

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

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

DeleteEksAnywhereSubscription

Service: Amazon Elastic Kubernetes Service

Deletes an expired or inactive subscription. Deleting inactive subscriptions removes them from the Amazon Web Services Management Console view and from list/describe API responses. Subscriptions can only be cancelled within 7 days of creation and are cancelled by creating a ticket in the Amazon Support Center.

Request Syntax

```
DELETE /eks-anywhere-subscriptions/id HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[id](#)

The ID of the subscription.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "subscription": {
    "arnautoRenew": boolean,
    "createdAt": number,
    "effectiveDate": number,
    "expirationDate": number,
    "id": "string",
    "licenseArns": [ "string" ],
  }
}
```

```
"licenseQuantity": number,
"licenses": [
    {
        "idstring",
        "token": "string"
    }
],
"licenseType": "string",
"status": "string",
"tags": {
    "string": "string"
},
"term": {
    "duration": number,
    "unit": "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.

subscription

The full description of the subscription to be deleted.

Type: [EksAnywhereSubscription](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

See Also

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

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

DeleteFargateProfile

Service: Amazon Elastic Kubernetes Service

Deletes an Amazon Fargate profile.

When you delete a Fargate profile, any Pod running on Fargate that was created with the profile is deleted. If the Pod matches another Fargate profile, then it is scheduled on Fargate with that profile. If it no longer matches any Fargate profiles, then it's not scheduled on Fargate and may remain in a pending state.

Only one Fargate profile in a cluster can be in the DELETING status at a time. You must wait for a Fargate profile to finish deleting before you can delete any other profiles in that cluster.

Request Syntax

```
DELETE /clusters/name/fargate-profiles/fargateProfileName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[fargateProfileName](#)

The name of the Fargate profile to delete.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

```
{  
    "fargateProfile": {  
        "clusterName": "string",  
        "createdAt": number,  
        "fargateProfileArn": "string",  
        "fargateProfileName": "string",  
        "health": {  
            "issues": [  
                {  
                    "code": "string",  
                    "message": "string",  
                    "resourceIds": [ "string" ]  
                }  
            ]  
        },  
        "podExecutionRoleArn": "string",  
        "selectors": [  
            {  
                "labels": {  
                    "string" : "string"  
                },  
                "namespace": "string"  
            }  
        ],  
        "status": "string",  
        "subnets": [ "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.

[fargateProfile](#)

The deleted Fargate profile.

Type: [FargateProfile](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerErrorException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example deletes a Fargate profile called `compute-label` in the `fargate` cluster.

Sample Request

```
DELETE /clusters/fargate/fargate-profiles/compute-label HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.284 Python/3.7.5 Darwin/18.7.0 botocore/1.13.20
X-Amz-Date: 20191120T203729Z
Authorization: AUTHPARAMS
Content-Length: 0
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 20 Nov 2019 20:37:30 GMT
Content-Type: application/json
Content-Length: 610
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: DeaRjFWPvHcFcXw=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "fargateProfile": {
    "fargateProfileName": "compute-label",
    "fargateProfileArn": "arn:aws:eks:us-west-2:012345678910:fargateprofile/fargate/
compute-label/xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
    "clusterName": "fargate",
    "createdAt": 1574206849.791,
    "podExecutionRoleArn": "arn:aws:iam::012345678910:role/AmazonEKSPodExecutionRole",
    "subnets": [
      "subnet-xxxxxxxxxxxxxxxxxx",
      "subnet-yyyyyyyyyyyyyyyyy"
    ],
    "selectors": [
      {
        "namespace": "kube-system",
        "labels": {
          "compute": "fargate"
        }
      }
    ]
  }
}
```

```
        }
    ],
    "status": "DELETING",
    "tags": {}
}
}
```

See Also

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

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

DeleteNodegroup

Service: Amazon Elastic Kubernetes Service

Deletes a managed node group.

Request Syntax

```
DELETE /clusters/name/node-groups/nodegroupName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[nodegroupName](#)

The name of the node group to delete.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

```
{
  "nodegroup": {
    "amiType": "string",
    "capacityType": "string",
    "clusterName": "string",
    "createdAt": number,
    "diskSize": number,
    "health": {
      "issues": [
        ...
      ]
    }
  }
}
```

```
{  
    "code": "string",  
    "message": "string",  
    "resourceIds": [ "string" ]  
}  
]  
],  
"instanceTypes": [ "string" ],  
"labels": {  
    "string" : "string"  
},  
"launchTemplate": {  
    "id": "string",  
    "name": "string",  
    "version": "string"  
},  
"modifiedAt": number,  
"nodegroupArn": "string",  
"nodegroupName": "string",  
"nodeRepairConfig": {  
    "enabled": boolean  
},  
"nodeRole": "string",  
"releaseVersion": "string",  
"remoteAccess": {  
    "ec2SshKey": "string",  
    "sourceSecurityGroups": [ "string" ]  
},  
"resources": {  
    "autoScalingGroups": [  
        {  
            "name": "string"  
        }  
    ],  
    "remoteAccessSecurityGroup": "string"  
},  
"scalingConfig": {  
    "desiredSize": number,  
    "maxSize": number,  
    "minSize": number  
},  
"status": "string",  
"subnets": [ "string" ],  
"tags": {
```

```
        "string" : "string"
    },
    "taints": [
        {
            "effect": "string",
            "key": "string",
            "value": "string"
        }
    ],
    "updateConfig": {
        "maxUnavailable": number,
        "maxUnavailablePercentage": number,
        "updateStrategy": "string"
    },
    "version": "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.

[nodegroup](#)

The full description of your deleted node group.

Type: [Nodegroup](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

This example deletes a managed node group called `standard` in the `my-cluster` cluster.

Sample Request

```
DELETE /clusters/my-cluster/node-groups/standard HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.275 Python/3.7.4 Darwin/18.7.0 botocore/1.13.11
X-Amz-Date: 20191111T202821Z
Authorization: AUTHPARAMS
Content-Length: 0
```

Sample Response

```
HTTP/1.1 200 OK
Date: Mon, 11 Nov 2019 20:28:22 GMT
Content-Type: application/json
Content-Length: 1121
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: DAuf9GbEPHcFxNw=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "nodegroup" : {
    "nodegroupName" : "standard",
    "nodegroupArn" : "arn:aws:eks:us-west-2:012345678910:nodegroup/my-cluster/standard/
xxxxxxxx-xxxx-xxxx-xxxxxxxxxxxxxxxxxxxx",
    "clusterName" : "my-cluster",
    "version" : "1.14",
    "releaseVersion" : "1.14.7-20190927",
    "createdAt" : 1.573496875151E9,
    "modifiedAt" : 1.573504102097E9,
    "status" : "DELETING",
    "scalingConfig" : {
      "minSize" : 2,
      "maxSize" : 6,
      "desiredSize" : 4
    },
    "instanceTypes" : [ "t3.medium" ],
```

```
"subnets" : [ "subnet-xxxxxxxxxxxxxxxxxxxx", "subnet-yyyyyyyyyyyyyyyy", "subnet-zzzzzzzzzzzzzzz" ],
  "remoteAccess" : {
    "ec2SshKey" : "id_rsa",
    "sourceSecurityGroups" : null
  },
  "amiType" : "AL2_x86_64",
  "nodeRole" : "arn:aws:iam::012345678910:role/managed-NodeInstanceRole-1V94UAUPQY7GS",
  "labels" : { },
  "resources" : {
    "autoScalingGroups" : [ {
      "name" : "eks-xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
    } ],
    "remoteAccessSecurityGroup" : "sg-xxxxxxxxxxxxxxxxxx"
  },
  "diskSize" : 20,
  "health" : {
    "issues" : [ ]
  },
  "tags" : { }
}
}
```

See Also

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

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

DeletePodIdentityAssociation

Service: Amazon Elastic Kubernetes Service

Deletes a EKS Pod Identity association.

The temporary Amazon credentials from the previous IAM role session might still be valid until the session expiry. If you need to immediately revoke the temporary session credentials, then go to the role in the IAM console.

Request Syntax

```
DELETE /clusters/name/pod-identity-associations/associationId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

associationId

The ID of the association to be deleted.

Required: Yes

name

The cluster name that

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "associationassociationArnstring",
```

```
"associationId": "string",
"clusterName": "string",
"createdAt": number,
"disableSessionTags": boolean,
"externalId": "string",
"modifiedAt": number,
"namespace": "string",
"ownerArn": "string",
"roleArn": "string",
"serviceAccount": "string",
"tags": {
    "string" : "string"
},
"targetRoleArn": "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.

[association](#)

The full description of the EKS Pod Identity association that was deleted.

Type: [PodIdentityAssociation](#) object

Errors

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

InvalidArgumentException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

See Also

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

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

DeregisterCluster

Service: Amazon Elastic Kubernetes Service

Deregisters a connected cluster to remove it from the Amazon EKS control plane.

A connected cluster is a Kubernetes cluster that you've connected to your control plane using the [Amazon EKS Connector](#).

Request Syntax

```
DELETE /cluster-registrations/name HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of the connected cluster to deregister.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "clusteraccessConfigauthenticationModestring",
      "bootstrapClusterCreatorAdminPermissionsboolean
    },
    "arnstring",
    "certificateAuthoritydatastring"
    },
    "clientRequestTokenstring",
  }
}
```

```
"computeConfig": {  
    "enabled": boolean,  
    "nodePools": [ "string" ],  
    "nodeRoleArn": "string"  
},  
"connectorConfig": {  
    "activationCode": "string",  
    "activationExpiry": number,  
    "activationId": "string",  
    "provider": "string",  
    "roleArn": "string"  
},  
"createdAt": number,  
"encryptionConfig": [  
    {  
        "provider": {  
            "keyArn": "string"  
        },  
        "resources": [ "string" ]  
    }  
],  
"endpoint": "string",  
"health": {  
    "issues": [  
        {  
            "code": "string",  
            "message": "string",  
            "resourceIds": [ "string" ]  
        }  
    ]  
},  
"id": "string",  
"identity": {  
    "oidc": {  
        "issuer": "string"  
    }  
},  
"kubernetesNetworkConfig": {  
    "elasticLoadBalancing": {  
        "enabled": boolean  
    },  
    "ipFamily": "string",  
    "serviceIpv4Cidr": "string",  
    "serviceIpv6Cidr": "string"
```

```
},
"logging": {
    "clusterLogging": [
        {
            "enabled": boolean,
            "types": [ "string" ]
        }
    ]
},
"name": "string",
"outpostConfig": {
    "controlPlaneInstanceType": "string",
    "controlPlanePlacement": {
        "groupName": "string"
    },
    "outpostArns": [ "string" ]
},
"platformVersion": "string",
"remoteNetworkConfig": {
    "remoteNodeNetworks": [
        {
            "cidrs": [ "string" ]
        }
    ],
    "remotePodNetworks": [
        {
            "cidrs": [ "string" ]
        }
    ]
},
"resourcesVpcConfig": {
    "clusterSecurityGroupId": "string",
    "endpointPrivateAccess": boolean,
    "endpointPublicAccess": boolean,
    "publicAccessCidrs": [ "string" ],
    "securityGroupIds": [ "string" ],
    "subnetIds": [ "string" ],
    "vpcId": "string"
},
"roleArn": "string",
"status": "string",
"storageConfig": {
    "blockStorage": {
        "enabled": boolean
    }
}
```

```
        },
      ],
      "tags": {
        "string": "string"
      },
      "upgradePolicy": {
        "supportType": "string"
      },
      "version": "string",
      "zonalShiftConfig": {
        "enabled": 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.

[cluster](#)

An object representing an Amazon EKS cluster.

Type: [Cluster](#) object

Errors

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

AccessDeniedException

You don't have permissions to perform the requested operation. The [IAM principal](#) making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see [Access management](#) in the *IAM User Guide*.

HTTP Status Code: 403

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

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](#)

DescribeAccessEntry

Service: Amazon Elastic Kubernetes Service

Describes an access entry.

Request Syntax

```
GET /clusters/name/access-entries/principalArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of your cluster.

Required: Yes

principalArn

The ARN of the IAM principal for the AccessEntry.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "accessEntry": {
    "accessEntryArn": "string",
    "clusterName": "string",
    "createdAt": number,
    "kubernetesGroups": [ "string" ],
    "modifiedAt": number,
    "principalArn": "string"
  }
}
```

```
"principalArn": "string",
"tags": {
    "string" : "string"
},
"type": "string",
"username": "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.

[accessEntry](#)

Information about the access entry.

Type: [AccessEntry](#) object

Errors

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

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with [ListClusters](#). You can view your available managed node groups with [ListNodegroups](#). Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example describes an access entry for an IAM role with the name `my-role`.

Sample Request

```
GET /clusters/my-cluster/access-entries/arn%3Aaws%3Aiam%3A%3A012345678910%3Arole%2Fmy-role HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/2.9.0 Python/3.9.11 Windows/10 exe/AMD64 prompt/off command/
eks.describe-access-entry
X-Amz-Date: 20230530T195959Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 30 May 2023 20:00:14 GMT
Content-Type: application/json
Content-Length: 485
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxx
Access-Control-Allow-Origin: *
Access-Control-Allow-Headers: *,Authorization,Date,X-Amz-Date,X-Amz-Security-Token,X-Amz-Target,content-type,x-amz-content-sha256,x-amz-user-agent,x-amzn-platform-id,x-amzn-trace-id
x-amz-apigw-id: FwJV-FPGvHcFzPg=
```

```
Access-Control-Allow-Methods: GET,HEAD,PUT,POST,DELETE,OPTIONS
Access-Control-Expose-Headers: x-amzn-errortype,x-amzn-errormessage,x-amzn-trace-id,x-
amzn-requestid,x-amz-apigw-id,date
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
    "accessEntry" : {
        "clusterName" : "my-cluster",
        "principalArn" : "arn:aws:iam::012345678910:role/my-role",
        "kubernetesGroups" : [ ],
        "accessEntryArn" : "arn:aws:eks:us-west-2:012345678910:accessEntry/my-cluster/
role/012345678910/my-role/xxx1111-xx1x-xx11-1x11-xxx111x111x1",
        "createdAt" : 1.685475163532E9,
        "modifiedAt" : 1.685475163532E9,
        "tags" : { },
        "username" : "arn:aws:sts::012345678910:assumed-role/my-role/{{SessionName}}",
        "type" : "STANDARD"
    }
}
```

See Also

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

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

DescribeAddon

Service: Amazon Elastic Kubernetes Service

Describes an Amazon EKS add-on.

Request Syntax

```
GET /clusters/name/addons/addonName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

addonName

The name of the add-on. The name must match one of the names returned by [ListAddons](#).

Required: Yes

name

The name of your cluster.

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^[0-9A-Za-z][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

{
  "addon": {
```

```
"addonArn": "string",
"addonName": "string",
"addonVersion": "string",
"clusterName": "string",
"configurationValues": "string",
"createdAt": "number",
"health": {
    "issues": [
        {
            "code": "string",
            "message": "string",
            "resourceIds": [ "string" ]
        }
    ]
},
"marketplaceInformation": {
    "productId": "string",
    "productUrl": "string"
},
"modifiedAt": "number",
"owner": "string",
"podIdentityAssociations": [ "string" ],
"publisher": "string",
"serviceAccountRoleArn": "string",
"status": "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.

addon

An Amazon EKS add-on. For more information, see [Amazon EKS add-ons](#) in the *Amazon EKS User Guide*.

Type: [Addon](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example describes an add-on named vpc-cni.

Sample Request

```
GET /clusters/1-18/addons/vpc-cni HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.298 Python/3.6.0 Windows/10 botocore/1.13.34
X-Amz-Date: 20201125T144831Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 25 Nov 2020 14:48:32 GMT
Content-Type: application/json
Content-Length: 472
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: WkY-BEEPPHcFwEg=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "addon" : {
    "addonName" : "vpc-cni",
    "clusterName" : "1-18",
    "status" : "ACTIVE",
    "addonVersion" : "v1.7.5-eksbuild.1",
    "health" : {
      "issues" : [ ]
    },
    "addonArn" : "arn:aws:eks:us-west-2:012345678910:addon/my-cluster/vpc-cni/xxxxxxxx-
xxxx-xxxx-xxxx-xxxxxxxxxxxx",
    "createdAt" : 1.606315184255E9,
```

```
"modifiedAt" : 1.606315202754E9,  
"serviceAccountRoleArn" : "arn:aws:iam::012345678910:role/AmazonEKSCNIRole",  
"tags" : { }  
}  
}
```

See Also

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

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

DescribeAddonConfiguration

Service: Amazon Elastic Kubernetes Service

Returns configuration options.

Request Syntax

```
GET /addons/configuration-schemas?addonName=addonName&addonVersion=addonVersion
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

addonName

The name of the add-on. The name must match one of the names returned by [DescribeAddonVersions](#).

Required: Yes

addonVersion

The version of the add-on. The version must match one of the versions returned by [DescribeAddonVersions](#).

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
    "addonName": "string",
    "addonVersion": "string",
    "configurationSchema": "string",
```

```
"podIdentityConfiguration": [  
    {  
        "recommendedManagedPolicies": [ "string" ],  
        "serviceAccount": "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.

[addonName](#)

The name of the add-on.

Type: String

[addonVersion](#)

The version of the add-on. The version must match one of the versions returned by [DescribeAddonVersions](#).

Type: String

[configurationSchema](#)

A JSON schema that's used to validate the configuration values you provide when an add-on is created or updated.

Type: String

[podIdentityConfiguration](#)

The Kubernetes service account name used by the add-on, and any suggested IAM policies. Use this information to create an IAM Role for the add-on.

Type: Array of [AddonPodIdentityConfiguration](#) objects

Errors

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

InvalidOperationException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

See Also

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

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

DescribeAddonVersions

Service: Amazon Elastic Kubernetes Service

Describes the versions for an add-on.

Information such as the Kubernetes versions that you can use the add-on with, the owner, publisher, and the type of the add-on are returned.

Request Syntax

```
GET /addons-supported-versions?  
addonName=addonName&kubernetesVersion=kubernetesVersion&maxResults=maxResults&nextToken=nextToken  
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

addonName

The name of the add-on. The name must match one of the names returned by [ListAddons](#).

kubernetesVersion

The Kubernetes versions that you can use the add-on with.

maxResults

The maximum number of results, returned in paginated output. You receive maxResults in a single page, along with a nextToken response element. You can see the remaining results of the initial request by sending another request with the returned nextToken value. This value can be between 1 and 100. If you don't use this parameter, 100 results and a nextToken value, if applicable, are returned.

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

nextToken

The nextToken value returned from a previous paginated request, where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

owners

The owner of the add-on. For valid owners, don't specify a value for this property.

publishers

The publisher of the add-on. For valid publishers, don't specify a value for this property.

types

The type of the add-on. For valid types, don't specify a value for this property.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "addons": [
    {
      "addonName": "string",
      "addonVersions": [
        {
          "addonVersion": "string",
          "architecture": [ "string" ],
          "compatibilities": [
            {
              "clusterVersion": "string",
              "defaultVersion": boolean,
              "platformVersions": [ "string" ]
            }
          ],
        }
      ],
    }
  ],
}
```

```
        "computeTypes": [ "string" ],
        "requiresConfiguration": boolean,
        "requiresIamPermissions": boolean
    },
],
"marketplaceInformation": {
    "productId": "string",
    "productUrl": "string"
},
"owner": "string",
"publisher": "string",
"type": "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.

addons

The list of available versions with Kubernetes version compatibility and other properties.

Type: Array of [AddonInfo](#) objects

nextToken

The nextToken value to include in a future `DescribeAddonVersions` request. When the results of a `DescribeAddonVersions` request exceed `maxResults`, you can use this value to retrieve the next page of results. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Type: String

Errors

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

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerErrorException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example describes the add-on versions available for an add-on named vpc-cni.

Sample Request

```
GET /addons-supported-versions?addonName=vpc-cni HTTP/1.1
```

```
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.298 Python/3.6.0 Windows/10 botocore/1.13.34
X-Amz-Date: 20201125T143627Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 25 Nov 2020 14:36:27 GMT
Content-Type: application/json
Content-Length: 418
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: WkXM1FDXvHcFaHg=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "addons": [
    {
      "addonName": "vpc-cni",
      "type": "networking",
      "addonVersions": [
        {
          "addonVersion": "v1.7.5-eksbuild.1",
          "architecture": ["amd64", "arm64"],
          "compatibilities": [
            {
              "clusterVersion": "1.18",
              "platformVersions": ["*"],
              "defaultVersion": true
            }
          ]
        },
        {
          "addonVersion": "v1.6.3-eksbuild.1",
          "architecture": ["amd64", "arm64"],
          "compatibilities": [
            {
              "clusterVersion": "1.18",
              "platformVersions": ["*"],
              "defaultVersion": false
            }
          ]
        }
      ],
      "nextToken": null
    }
  ]
}
```

See Also

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

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

DescribeCluster

Service: Amazon Elastic Kubernetes Service

Describes an Amazon EKS cluster.

The API server endpoint and certificate authority data returned by this operation are required for kubelet and kubectl to communicate with your Kubernetes API server. For more information, see [Creating or updating a kubeconfig file for an Amazon EKS cluster](#).

Note

The API server endpoint and certificate authority data aren't available until the cluster reaches the ACTIVE state.

Request Syntax

```
GET /clusters/name HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of your cluster.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "cluster": {
    "accessConfig
```

```
"authenticationMode": "string",
"bootstrapClusterCreatorAdminPermissions": boolean
},
"arn": "string",
"certificateAuthority": {
    "data": "string"
},
"clientRequestToken": "string",
"computeConfig": {
    "enabled": boolean,
    "nodePools": [ "string" ],
    "nodeRoleArn": "string"
},
"connectorConfig": {
    "activationCode": "string",
    "activationExpiry": number,
    "activationId": "string",
    "provider": "string",
    "roleArn": "string"
},
"createdAt": number,
"encryptionConfig": [
    {
        "provider": {
            "keyArn": "string"
        },
        "resources": [ "string" ]
    }
],
"endpoint": "string",
"health": {
    "issues": [
        {
            "code": "string",
            "message": "string",
            "resourceIds": [ "string" ]
        }
    ]
},
"id": "string",
"identity": {
    "oidc": {
        "issuer": "string"
    }
}
```

```
},
"kubernetesNetworkConfig": {
  "elasticLoadBalancing": {
    "enabled": boolean
  },
  "ipFamily": "string",
  "serviceIpv4Cidr": "string",
  "serviceIpv6Cidr": "string"
},
"logging": {
  "clusterLogging": [
    {
      "enabled": boolean,
      "types": [ "string" ]
    }
  ]
},
"name": "string",
"outpostConfig": {
  "controlPlaneInstanceType": "string",
  "controlPlanePlacement": {
    "groupName": "string"
  },
  "outpostArns": [ "string" ]
},
"platformVersion": "string",
"remoteNetworkConfig": {
  "remoteNodeNetworks": [
    {
      "cidrs": [ "string" ]
    }
  ],
  "remotePodNetworks": [
    {
      "cidrs": [ "string" ]
    }
  ]
},
"resourcesVpcConfig": {
  "clusterSecurityGroupId": "string",
  "endpointPrivateAccess": boolean,
  "endpointPublicAccess": boolean,
  "publicAccessCidrs": [ "string" ],
  "securityGroupIds": [ "string" ],
```

```
        "subnetIds": [ "string" ],
        "vpcId": "string"
    },
    "roleArn": "string",
    "status": "string",
    "storageConfig": {
        "blockStorage": {
            "enabled": boolean
        }
    },
    "tags": {
        "string" : "string"
    },
    "upgradePolicy": {
        "supportType": "string"
    },
    "version": "string",
    "zonalShiftConfig": {
        "enabled": 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.

[cluster](#)

The full description of your specified cluster.

Type: [Cluster](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerErrorException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example describes a cluster named `my-cluster`.

Sample Request

```
GET /clusters/my-cluster HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.120 Python/3.7.0 Darwin/18.2.0 botocore/1.12.110
X-Amz-Date: 20190322T161109Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Fri, 22 Mar 2019 16:11:07 GMT
Content-Type: application/json
Content-Length: 682
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: W85cPGkVvHcFa4g=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "cluster": {
    "name": "my-cluster",
    "arn": "arn:aws:eks:us-west-2:012345678910:cluster/my-cluster",
    "createdAt": 1553270518.433,
    "version": "1.11",
    "endpoint": null,
    "roleArn": "arn:aws:iam::012345678910:role/eksClusterRole",
    "resourcesVpcConfig": {
      "subnetIds": [
        "subnet-xxxxxxxxxxxxxxxxxx",
        "subnet-yyyyyyyyyyyyyyyyy",
        "subnet-zzzzzzzzzzzzzzz"
      ],
      "securityGroupIds": [
        "sg-xxxxxxxxxxxxxxxxxx"
      ],
      "vpcId": "vpc-xxxxxxxxxxxxxxxxxx",
      "endpointPublicAccess": true,
      "endpointPrivateAccess": true
    },
    "logging": {
      "clusterLogging": [

```

```
{  
    "types": [  
        "api",  
        "audit",  
        "authenticator",  
        "controllerManager",  
        "scheduler"  
    ],  
    "enabled": false  
}  
]  
},  
"identity": {  
    "oidc": {  
        "issuer": null  
    }  
},  
"status": "CREATING",  
"certificateAuthority": {  
    "data": null  
},  
"clientRequestToken": null,  
"platformVersion": "eks.2"  
}  
}  
}
```

See Also

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

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

- [Amazon SDK for Ruby V3](#)

DescribeClusterVersions

Service: Amazon Elastic Kubernetes Service

Lists available Kubernetes versions for Amazon EKS clusters.

Request Syntax

```
GET /cluster-versions?  
clusterType=clusterType&clusterVersions=clusterVersions&defaultOnly=defaultOnly&includeAll=includeAll  
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[clusterType](#)

The type of cluster to filter versions by.

[clusterVersions](#)

List of specific cluster versions to describe.

[defaultOnly](#)

Filter to show only default versions.

[includeAll](#)

Include all available versions in the response.

[maxResults](#)

Maximum number of results to return.

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

[nextToken](#)

Pagination token for the next set of results.

[status](#)

⚠ Important

This field is deprecated. Use `versionStatus` instead, as that field matches for input and output of this action.

Filter versions by their current status.

Valid Values: `unsupported` | `standard-support` | `extended-support`

[versionStatus](#)

Filter versions by their current status.

Valid Values: `UNSUPPORTED` | `STANDARD_SUPPORT` | `EXTENDED_SUPPORT`

Request Body

The request does not have a request body.

Response Syntax

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

{
  "clusterVersions": [
    {
      "clusterTypestring",
      "clusterVersionstring",
      "defaultPlatformVersionstring",
      "defaultVersionboolean,
      "endOfExtendedSupportDatenumber,
      "endOfStandardSupportDatenumber,
      "kubernetesPatchVersionstring",
      "releaseDatenumber,
      "statusstring",
      "versionStatusstring"
    }
  \\\\\\\\\\],
}
```

```
    "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.

[clusterVersions](#)

List of cluster version information objects.

Type: Array of [ClusterVersionInformation](#) objects

[nextToken](#)

Pagination token for the next set of results.

Type: String

Errors

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

InvalidArgumentException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

See Also

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

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

DescribeEksAnywhereSubscription

Service: Amazon Elastic Kubernetes Service

Returns descriptive information about a subscription.

Request Syntax

```
GET /eks-anywhere-subscriptions/id HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

id

The ID of the subscription.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "subscription": {
    "arn": "string",
    "autoRenew": boolean,
    "createdAt": number,
    "effectiveDate": number,
    "expirationDate": number,
    "id": "string",
    "licenseArns": [ "string" ],
    "licenseQuantity": number,
    "licenses": [
      {
        "id": "string",
        "token": "string"
      }
    ]
  }
}
```

```
        },
      ],
      "licenseType": "string",
      "status": "string",
      "tags": {
        "string" : "string"
      },
      "term": {
        "duration": number,
        "unit": "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.

subscription

The full description of the subscription.

Type: [EksAnywhereSubscription](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

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](#)

DescribeFargateProfile

Service: Amazon Elastic Kubernetes Service

Describes an Amazon Fargate profile.

Request Syntax

```
GET /clusters/name/fargate-profiles/fargateProfileName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[fargateProfileName](#)

The name of the Fargate profile to describe.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "fargateProfile": {
    "clusterNamecreatedAt": number,
    "fargateProfileArn": "string",
    "fargateProfileName": "string",
  }
}
```

```
"health    "issues        {  
            "code            "message            "resourceIds        }  
    ]  
},  
"podExecutionRoleArn"selectors    {  
        "labels            "string" : "string"  
        },  
        "namespace    }  
],  
"status"subnets"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.

[fargateProfile](#)

The full description of your Fargate profile.

Type: [FargateProfile](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example describes a Fargate profile named `default-with-infrastructure-label` in the `my-cluster` cluster.

Sample Request

```
GET /clusters/my-cluster/fargate-profiles/default-with-infrastructure-label HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.284 Python/3.7.5 Darwin/18.7.0 botocore/1.13.20
X-Amz-Date: 20191120T204303Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 20 Nov 2019 20:43:04 GMT
Content-Type: application/json
Content-Length: 651
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: DebFwF0YPHcFkog=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "fargateProfile": {
    "fargateProfileName": "default-with-infrastructure-label",
    "fargateProfileArn": "arn:aws:eks:us-west-2:012345678910:fargateprofile/my-cluster/default-with-infrastructure-label/xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
    "clusterName": "fargate",
    "createdAt": 1574281537.866,
    "podExecutionRoleArn": "arn:aws:iam::012345678910:role/AmazonEKSFargatePodExecutionRole",
    "subnets": [
      "subnet-xxxxxxxxxxxxxxxxxx",
      "subnet-yyyyyyyyyyyyyyyyyy"
    ],
    "selectors": [
      {
        "namespace": "default",
        "labels": {
          "infrastructure": "fargate"
        }
      }
    ],
    "status": "ACTIVE",
    "tags": {}
  }
}
```

```
    }  
}
```

See Also

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

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

DescribeIdentityProviderConfig

Service: Amazon Elastic Kubernetes Service

Describes an identity provider configuration.

Request Syntax

```
POST /clusters/name/identity-provider-configs/describe HTTP/1.1
Content-type: application/json

{
  "identityProviderConfignamestring",
    "typestring"
  }
}
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of your cluster.

Required: Yes

Request Body

The request accepts the following data in JSON format.

identityProviderConfig

An object representing an identity provider configuration.

Type: [IdentityProviderConfig](#) object

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "identityProviderConfig": {
    "oidc": {
      "clientId": "string",
      "clusterName": "string",
      "groupsClaim": "string",
      "groupsPrefix": "string",
      "identityProviderConfigArn": "string",
      "identityProviderConfigName": "string",
      "issuerUrl": "string",
      "requiredClaims": {
        "string" : "string"
      },
      "status": "string",
      "tags": {
        "string" : "string"
      },
      "usernameClaim": "string",
      "usernamePrefix": "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.

[identityProviderConfig](#)

The object that represents an OpenID Connect (OIDC) identity provider configuration.

Type: [IdentityProviderConfigResponse](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

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](#)

DescribeInsight

Service: Amazon Elastic Kubernetes Service

Returns details about an insight that you specify using its ID.

Request Syntax

```
GET /clusters/name/insights/id HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of the cluster to describe the insight for.

Required: Yes

[id](#)

The identity of the insight to describe.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "insight": {
    "additionalInfostring": "string"
    },
    "category": "string",
    "categorySpecificSummary": {
      "addonCompatibilityDetails": [
        {
          "
```

```
        "compatibleVersions": [ "string" ],
        "name": "string"
    }
],
"deprecationDetails": [
{
    "clientStats": [
        {
            "lastRequestTime": number,
            "numberOfRequestsLast30Days": number,
            "userAgent": "string"
        }
    ],
    "replacedWith": "string",
    "startServingReplacementVersion": "string",
    "stopServingVersion": "string",
    "usage": "string"
}
]
},
"description": "string",
"id": "string",
"insightStatus": {
    "reason": "string",
    "status": "string"
},
"kubernetesVersion": "string",
"lastRefreshTime": number,
"lastTransitionTime": number,
"name": "string",
"recommendation": "string",
"resources": [
{
    "arn": "string",
    "insightStatus": {
        "reason": "string",
        "status": "string"
    },
    "kubernetesResourceUri": "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.

insight

The full description of the insight.

Type: [Insight](#) object

Errors

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

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

See Also

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

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

DescribeNodegroup

Service: Amazon Elastic Kubernetes Service

Describes a managed node group.

Request Syntax

```
GET /clusters/name/node-groups/nodegroupName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[nodegroupName](#)

The name of the node group to describe.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "nodegroup": {
    "amiType": "string",
    "capacityType": "string",
    "clusterName": "string",
    "createdAt": number,
    "diskSize": number,
    "health": {
      "issues": [
        ...
      ]
    }
  }
}
```

```
{  
    "code": "string",  
    "message": "string",  
    "resourceIds": [ "string" ]  
}  
]  
],  
"instanceTypes": [ "string" ],  
"labels": {  
    "string" : "string"  
},  
"launchTemplate": {  
    "id": "string",  
    "name": "string",  
    "version": "string"  
},  
"modifiedAt": number,  
"nodegroupArn": "string",  
"nodegroupName": "string",  
"nodeRepairConfig": {  
    "enabled": boolean  
},  
"nodeRole": "string",  
"releaseVersion": "string",  
"remoteAccess": {  
    "ec2SshKey": "string",  
    "sourceSecurityGroups": [ "string" ]  
},  
"resources": {  
    "autoScalingGroups": [  
        {  
            "name": "string"  
        }  
    ],  
    "remoteAccessSecurityGroup": "string"  
},  
"scalingConfig": {  
    "desiredSize": number,  
    "maxSize": number,  
    "minSize": number  
},  
"status": "string",  
"subnets": [ "string" ],  
"tags": {
```

```
        "string" : "string"
    },
    "taints": [
        {
            "effect": "string",
            "key": "string",
            "value": "string"
        }
    ],
    "updateConfig": {
        "maxUnavailable": number,
        "maxUnavailablePercentage": number,
        "updateStrategy": "string"
    },
    "version": "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.

[nodegroup](#)

The full description of your node group.

Type: [Nodegroup](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

This example describes a managed node group called `standard` in the `my-cluster` cluster.

Sample Request

```
GET /clusters/my-cluster/node-groups/standard HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.275 Python/3.7.4 Darwin/18.7.0 botocore/1.13.11
X-Amz-Date: 20191111T183235Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Mon, 11 Nov 2019 18:32:35 GMT
Content-Type: application/json
Content-Length: 1119
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: DAdikHT3vHcFz3w=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "nodegroup": {
    "nodegroupName": "standard",
    "nodegroupArn": "arn:aws:eks:us-west-2:012345678910:nodegroup/my-cluster/standard/
xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
    "clusterName": "my-cluster",
    "version": "1.14",
    "releaseVersion": "1.14.7-20190927",
    "createdAt": 1573496875.151,
    "modifiedAt": 1573496979.583,
    "status": "ACTIVE",
    "scalingConfig": {
      "minSize": 1,
      "maxSize": 3,
      "desiredSize": 2
    },
    "instanceTypes": [
      "t3.medium"
    ],
    "subnets": [
      "subnet-xxxxxxxxxxxxxxxx",
      "subnet-yyyyyyyyyyyyyyyyy",
      "subnet-zzzzzzzzzzzzzzz"
    ]
  }
}
```

```
],
  "remoteAccess": {
    "ec2SshKey": "id_rsa",
    "sourceSecurityGroups": null
  },
  "amiType": "AL2_x86_64",
  "nodeRole": "arn:aws:iam::012345678910:role/managed-
NodeInstanceRole-1V94UAUPQY7GS",
  "labels": {},
  "resources": {
    "autoScalingGroups": [
      {
        "name": "eks-xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
      }
    ],
    "remoteAccessSecurityGroup": "sg-xxxxxxxxxxxxxxxxxx"
  },
  "diskSize": 20,
  "health": {
    "issues": []
  },
  "tags": {}
}
}
```

See Also

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

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

- [Amazon SDK for Ruby V3](#)

DescribePodIdentityAssociation

Service: Amazon Elastic Kubernetes Service

Returns descriptive information about an EKS Pod Identity association.

This action requires the ID of the association. You can get the ID from the response to the `CreatePodIdentityAssociation` for newly created associations. Or, you can list the IDs for associations with `ListPodIdentityAssociations` and filter the list by namespace or service account.

Request Syntax

```
GET /clusters/name/pod-identity-associations/associationId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

associationId

The ID of the association that you want the description of.

Required: Yes

name

The name of the cluster that the association is in.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "association": {
    "associationArn
```

```
"associationId": "string",
"clusterName": "string",
"createdAt": number,
"disableSessionTags": boolean,
"externalId": "string",
"modifiedAt": number,
"namespace": "string",
"ownerArn": "string",
"roleArn": "string",
"serviceAccount": "string",
"tags": {
    "string" : "string"
},
"targetRoleArn": "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.

association

The full description of the EKS Pod Identity association.

Type: [PodIdentityAssociation](#) object

Errors

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

InvalidArgumentException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

See Also

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

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

DescribeUpdate

Service: Amazon Elastic Kubernetes Service

Describes an update to an Amazon EKS resource.

When the status of the update is Successful, the update is complete. If an update fails, the status is Failed, and an error detail explains the reason for the failure.

Request Syntax

```
GET /clusters/name/updates/updateId?addonName=addonName&nodegroupName=nodegroupName
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

addonName

The name of the add-on. The name must match one of the names returned by [ListAddons](#).

This parameter is required if the update is an add-on update.

name

The name of the Amazon EKS cluster associated with the update.

Required: Yes

nodegroupName

The name of the Amazon EKS node group associated with the update. This parameter is required if the update is a node group update.

updateId

The ID of the update to describe.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "update": {
    "createdAt": number,
    "errors": [
      {
        "errorCode": "string",
        "errorMessage": "string",
        "resourceIds": [ "string" ]
      }
    ],
    "id": "string",
    "params": [
      {
        "type": "string",
        "value": "string"
      }
    ],
    "status": "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.

update

The full description of the specified update.

Type: [Update object](#)

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example describes an update with the ID 9f771284-9e30-4886-b5b1-3789b6bea4dc for the my-cluster cluster.

Sample Request

```
GET /clusters/my-cluster/updates/9f771284-9e30-4886-b5b1-3789b6bea4dc HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.56 Python/3.7.0 Darwin/17.7.0 botocore/1.12.46
X-Amz-Date: 20181129T172927Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 29 Nov 2018 17:29:27 GMT
Content-Type: application/json
Content-Length: 228
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: RIo-oFsVvHcFXng=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "update": {
    "errors": [],
    "params": [
      {
        "value": "1.11",
        "type": "Version"
      },
      {
        "value": "eks.1",
        "type": "PlatformVersion"
      }
    ],
    "status": "InProgress",
    "id": "9f771284-9e30-4886-b5b1-3789b6bea4dc",
    "createdAt": 1543512515.848,
    "type": "VersionUpdate"
  }
}
```

See Also

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

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

DisassociateAccessPolicy

Service: Amazon Elastic Kubernetes Service

Disassociates an access policy from an access entry.

Request Syntax

```
DELETE /clusters/name/access-entries/principalArn/access-policies/policyArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[policyArn](#)

The ARN of the policy to disassociate from the access entry. For a list of associated policies ARNs, use [ListAssociatedAccessPolicies](#).

Required: Yes

[principalArn](#)

The ARN of the IAM principal for the AccessEntry.

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

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

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example disassociates the `AmazonEKSAdminPolicy` from an access entry.

Sample Request

```
DELETE /clusters/my-cluster/access-entries/arn%3Aaws%3Aiam%3A012345678910%3Arole
%2Fmy-role/access-policies/arn%3Aaws%3Aeks%3A%3Aaws%3Acluster-access-policy
%2FAmazonEKSAdminPolicy HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/2.9.0 Python/3.9.11 Windows/10 exe/AMD64 prompt/off command/
eks.disassociate-access-policy
X-Amz-Date: 20230531T155944Z
Authorization: AUTHPARAMS
Content-Length: 0
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 31 May 2023 16:00:00 GMT
Content-Type: application/json
Content-Length: 2
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxx
Access-Control-Allow-Origin: *
Access-Control-Allow-Headers: *,Authorization,Date,X-Amz-Date,X-Amz-Security-Token,X-Amz-Target,content-type,x-amz-content-sha256,x-amz-user-agent,x-amzn-platform-id,x-amzn-trace-id
x-amz-apigw-id: Fy5FqGDvPHcFgtw=
Access-Control-Allow-Methods: GET,HEAD,PUT,POST,DELETE,OPTIONS
Access-Control-Expose-Headers: x-amzn-errortype,x-amzn-errormessage,x-amzn-trace-id,x-amzn-requestid,x-amz-apigw-id,date
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{}
```

See Also

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

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

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

DisassociateIdentityProviderConfig

Service: Amazon Elastic Kubernetes Service

Disassociates an identity provider configuration from a cluster.

If you disassociate an identity provider from your cluster, users included in the provider can no longer access the cluster. However, you can still access the cluster with IAM principals.

Request Syntax

```
POST /clusters/name/identity-provider-configs/disassociate HTTP/1.1
Content-type: application/json

{
  "clientRequestTokenstring",
  "identityProviderConfignamestring",
    "typestring"
  }
}
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of your cluster.

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientRequestToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

identityProviderConfig

An object representing an identity provider configuration.

Type: [IdentityProviderConfig object](#)

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

```
{  
  "update": {  
    "createdAt": number,  
    "errors": [  
      {  
        "errorCode": "string",  
        "errorMessage": "string",  
        "resourceIds": [ "string" ]  
      }  
    ],  
    "id": "string",  
    "params": [  
      {  
        "type": "string",  
        "value": "string"  
      }  
    ],  
    "status": "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.

update

An object representing an asynchronous update.

Type: [Update object](#)

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerError

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ThrottlingError

The request or operation couldn't be performed because a service is throttling requests.

HTTP Status Code: 429

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example disassociates an OIDC identity provider named my-config from a cluster.

Sample Request

```
POST /clusters/my-cluster/identity-provider-configs/disassociate HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.298 Python/3.6.0 Windows/10 botocore/1.13.34
X-Amz-Date: 20201215T211826Z
Authorization: AUTHPARAMS
Content-Length: 127

{
  "identityProviderConfig": {
    "type": "oidc",
    "name": "my-config"
  }
}
```

```
 },
 "clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 15 Dec 2020 21:18:27 GMT
Content-Type: application/json
Content-Length: 297
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: XnM1dE8TvHcFn8Q=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "update" : {
    "id" : "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
    "status" : "InProgress",
    "type" : "DisassociateIdentityProviderConfig",
    "params" : [ {
      "type" : "IdentityProviderConfig",
      "value" : "[ ]"
    }],
    "createdAt" : 1.60806710785E9,
    "errors" : [ ]
  }
}
```

See Also

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

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

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

ListAccessEntries

Service: Amazon Elastic Kubernetes Service

Lists the access entries for your cluster.

Request Syntax

```
GET /clusters/name/access-entries?  
associatedPolicyArn=associatedPolicyArn&maxResults=maxResults&nextToken=nextToken  
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[associatedPolicyArn](#)

The ARN of an AccessPolicy. When you specify an access policy ARN, only the access entries associated to that access policy are returned. For a list of available policy ARNs, use [ListAccessPolicies](#).

[name](#)

The name of your cluster.

Required: Yes

[maxResults](#)

The maximum number of results, returned in paginated output. You receive `maxResults` in a single page, along with a `nextToken` response element. You can see the remaining results of the initial request by sending another request with the returned `nextToken` value. This value can be between 1 and 100. If you don't use this parameter, 100 results and a `nextToken` value, if applicable, are returned.

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

[nextToken](#)

The `nextToken` value returned from a previous paginated request, where `maxResults` was used and the results exceeded the value of that parameter. Pagination continues from the end

of the previous results that returned the `nextToken` value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "accessEntriesnextToken
```

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.

[accessEntries](#)

The list of access entries that exist for the cluster.

Type: Array of strings

[nextToken](#)

The `nextToken` value returned from a previous paginated request, where `maxResults` was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the `nextToken` value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Type: String

Errors

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

InvalidArgumentException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example lists the access entries for a cluster.

Sample Request

```
GET /clusters/my-cluster/access-entries HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/2.9.0 Python/3.9.11 Windows/10 exe/AMD64 prompt/off command/
eks.list-access-entries
X-Amz-Date: 20230530T201107Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 30 May 2023 20:11:07 GMT
Content-Type: application/json
Content-Length: 124
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxx
Access-Control-Allow-Origin: *
Access-Control-Allow-Headers: *,Authorization,Date,X-Amz-Date,X-Amz-Security-Token,X-Amz-Target,content-type,x-amz-content-sha256,x-amz-user-agent,x-amzn-platform-id,x-amzn-trace-id
x-amz-apigw-id: FwK-WFHZvHcFjhA=
Access-Control-Allow-Methods: GET,HEAD,PUT,POST,DELETE,OPTIONS
Access-Control-Expose-Headers: x-amzn-errortype,x-amzn-errormessage,x-amzn-trace-id,x-amzn-requestid,x-amz-apigw-id,date
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx
```

```
Connection: keep-alive

{
  "accessEntries": ["arn:aws:iam::012345678910:role/my-other-role",
    "arn:aws:iam::012345678910:role/my-role"],
  "nextToken": null
}
```

See Also

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

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

ListAccessPolicies

Service: Amazon Elastic Kubernetes Service

Lists the available access policies.

Request Syntax

```
GET /access-policies?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of results, returned in paginated output. You receive maxResults in a single page, along with a nextToken response element. You can see the remaining results of the initial request by sending another request with the returned nextToken value. This value can be between 1 and 100. If you don't use this parameter, 100 results and a nextToken value, if applicable, are returned.

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

nextToken

The nextToken value returned from a previous paginated request, where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value. This value is null when there are no more results to return.

 **Note**

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Request Body

The request does not have a request body.

Response Syntax

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

{
    "accessPolicies": [
        {
            "arn": "string",
            "name": "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.

accessPolicies

The list of available access policies. You can't view the contents of an access policy using the API. To view the contents, see [Access policy permissions](#) in the *Amazon EKS User Guide*.

Type: Array of [AccessPolicy](#) objects

nextToken

The nextToken value returned from a previous paginated request, where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value. This value is null when there are no more results to return.

 **Note**

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Type: String

Errors

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

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example lists the available access policies for a cluster.

Sample Request

```
GET /access-policies HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/2.9.0 Python/3.9.11 Windows/10 exe/AMD64 prompt/off command/
eks.list-access-policies
X-Amz-Date: 20230531T133734Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 31 May 2023 13:37:35 GMT
Content-Type: application/json
```

```
Content-Length: 543
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
Access-Control-Allow-Origin: *
Access-Control-Allow-Headers: *,Authorization,Date,X-Amz-Date,X-Amz-Security-Token,X-Amz-Target,content-type,x-amz-content-sha256,x-amz-user-agent,x-amzn-platform-id,x-amzn-trace-id
x-amz-apigw-id: FykQ6HjMvHcFbPA=
Access-Control-Allow-Methods: GET,HEAD,PUT,POST,DELETE,OPTIONS
Access-Control-Expose-Headers: x-amzn-errortype,x-amzn-errormessage,x-amzn-trace-id,x-amzn-requestid,x-amz-apigw-id,date
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "accessPolicies": [
    {
      "name": "AmazonEKSAdminPolicy",
      "arn": "arn:aws:eks::aws:cluster-access-policy/AmazonEKSAdminPolicy"
    },
    {
      "name": "AmazonEKSClusterAdminPolicy",
      "arn": "arn:aws:eks::aws:cluster-access-policy/AmazonEKSClusterAdminPolicy"
    },
    {
      "name": "AmazonEKSEditPolicy",
      "arn": "arn:aws:eks::aws:cluster-access-policy/AmazonEKSEditPolicy"
    },
    {
      "name": "AmazonEKSViewPolicy",
      "arn": "arn:aws:eks::aws:cluster-access-policy/AmazonEKSViewPolicy"
    },
    {
      "name": "AmazonEMRJobPolicy",
      "arn": "arn:aws:eks::aws:cluster-access-policy/AmazonEMRJobPolicy"
    }
  ],
  "nextToken": null
}
```

See Also

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

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

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

ListAddons

Service: Amazon Elastic Kubernetes Service

Lists the installed add-ons.

Request Syntax

```
GET /clusters/name/addons?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^[0-9A-Za-z][A-Za-z0-9\-_]*

Required: Yes

[maxResults](#)

The maximum number of results, returned in paginated output. You receive maxResults in a single page, along with a nextToken response element. You can see the remaining results of the initial request by sending another request with the returned nextToken value. This value can be between 1 and 100. If you don't use this parameter, 100 results and a nextToken value, if applicable, are returned.

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

[nextToken](#)

The nextToken value returned from a previous paginated request, where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Request Body

The request does not have a request body.

Response Syntax

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

{
    "addonsstring" \],
    "nextTokenstring"
}
```

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.

[addons](#)

A list of installed add-ons.

Type: Array of strings

[nextToken](#)

The nextToken value to include in a future ListAddons request. When the results of a ListAddons request exceed maxResults, you can use this value to retrieve the next page of results. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Type: String

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidArgumentException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with [ListClusters](#). You can view your available managed node groups with [ListNodegroups](#). Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerError

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example lists the add-ons installed to a cluster.

Sample Request

```
GET /clusters/1-18/addons HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.298 Python/3.6.0 Windows/10 botocore/1.13.34
X-Amz-Date: 20201125T144629Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 25 Nov 2020 14:46:30 GMT
Content-Type: application/json
Content-Length: 39
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: WkYq8HCuvHcFU3Q=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "addons": ["vpc-cni"],
  "nextToken": null
}
```

{}

See Also

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

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

ListAssociatedAccessPolicies

Service: Amazon Elastic Kubernetes Service

Lists the access policies associated with an access entry.

Request Syntax

```
GET /clusters/name/access-entries/principalArn/access-policies?  
maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[maxResults](#)

The maximum number of results, returned in paginated output. You receive `maxResults` in a single page, along with a `nextToken` response element. You can see the remaining results of the initial request by sending another request with the returned `nextToken` value. This value can be between 1 and 100. If you don't use this parameter, 100 results and a `nextToken` value, if applicable, are returned.

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

[nextToken](#)

The `nextToken` value returned from a previous paginated request, where `maxResults` was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the `nextToken` value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

principalArn

The ARN of the IAM principal for the AccessEntry.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "associatedAccessPolicies": [
    {
      "accessScopenamespacestypeassociatedAtnumber,
      "modifiedAtnumber,
      "policyArnclusterNamenextTokenprincipalArn
```

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.

associatedAccessPolicies

The list of access policies associated with the access entry.

Type: Array of [AssociatedAccessPolicy](#) objects

clusterName

The name of your cluster.

Type: String

nextToken

The nextToken value returned from a previous paginated request, where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value. This value is null when there are no more results to return.

 **Note**

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Type: String

principalArn

The ARN of the IAM principal for the AccessEntry.

Type: String

Errors

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

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example lists the access policies that are associated with an access entry.

Sample Request

```
GET /clusters/my-cluster/access-entries/arn%3Aaws%3Aiam%3A%3A012345678910%3Arole%2Fmy-role/access-policies HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/2.9.0 Python/3.9.11 Windows/10 exe/AMD64 prompt/off command/eks.list-associated-access-policies
X-Amz-Date: 20230531T155324Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 31 May 2023 15:53:34 GMT
Content-Type: application/json
Content-Length: 306
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
```

```
Access-Control-Allow-Origin: *
Access-Control-Allow-Headers: *,Authorization,Date,X-Amz-Date,X-Amz-Security-Token,X-Amz-Target,content-type,x-amz-content-sha256,x-amz-user-agent,x-amzn-platform-id,x-amzn-trace-id
x-amz-apigw-id: Fy4KSHE1vHcFWCQ=
Access-Control-Allow-Methods: GET,HEAD,PUT,POST,DELETE,OPTIONS
Access-Control-Expose-Headers: x-amzn-errortype,x-amzn-errormessage,x-amzn-trace-id,x-amzn-requestid,x-amz-apigw-id,date
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "clusterName": "my-cluster",
  "principalArn": "arn:aws:iam::012345678910:role/my-role",
  "nextToken": null,
  "associatedAccessPolicies": [
    {
      "policyArn": "arn:aws:eks::aws:cluster-access-policy/AmazonEKSAdminPolicy",
      "accessScope": {
        "type": "cluster",
        "namespaces": []
      },
      "associatedAt": 1685540747.281,
      "modifiedAt": 1685540747.281
    }
  ]
}
```

See Also

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

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

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

ListClusters

Service: Amazon Elastic Kubernetes Service

Lists the Amazon EKS clusters in your Amazon account in the specified Amazon Web Services Region.

Request Syntax

```
GET /clusters?include=include&maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

include

Indicates whether external clusters are included in the returned list. Use 'all' to return <https://docs.amazonaws.cn/eks/latest/userguide/eks-connector.html>connected clusters, or blank to return only Amazon EKS clusters. 'all' must be in lowercase otherwise an error occurs.

maxResults

The maximum number of results, returned in paginated output. You receive maxResults in a single page, along with a nextToken response element. You can see the remaining results of the initial request by sending another request with the returned nextToken value. This value can be between 1 and 100. If you don't use this parameter, 100 results and a nextToken value, if applicable, are returned.

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

nextToken

The nextToken value returned from a previous paginated request, where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "clustersstring" ],
  "nextTokenstring"
}
```

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.

clusters

A list of all of the clusters for your account in the specified Amazon Web Services Region .

Type: Array of strings

nextToken

The nextToken value returned from a previous paginated request, where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Type: String

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example lists all of the Amazon EKS clusters in the specified Amazon Web Services Region.

Sample Request

```
GET /clusters HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.15.0 Python/3.6.5 Darwin/16.7.0 botocore/1.10.0
X-Amz-Date: 20180531T231200Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 31 May 2018 23:12:00 GMT
Content-Type: application/json
Content-Length: 46
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: HxkiCF8EPHcF4nw=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
    "clusters": [
        "my-cluster",
        "prod"
    ],
    "nextToken": null
}
```

See Also

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

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

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

ListEksAnywhereSubscriptions

Service: Amazon Elastic Kubernetes Service

Displays the full description of the subscription.

Request Syntax

```
GET /eks-anywhere-subscriptions?  
includeStatus=includeStatus&maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

includeStatus

An array of subscription statuses to filter on.

Valid Values: CREATING | ACTIVE | UPDATING | EXPIRING | EXPIRED | DELETING

maxResults

The maximum number of cluster results returned by ListEksAnywhereSubscriptions in paginated output. When you use this parameter, ListEksAnywhereSubscriptions returns only maxResults results in a single page along with a nextToken response element. You can see the remaining results of the initial request by sending another ListEksAnywhereSubscriptions request with the returned nextToken value. This value can be between 1 and 100. If you don't use this parameter, ListEksAnywhereSubscriptions returns up to 10 results and a nextToken value if applicable.

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

nextToken

The nextToken value returned from a previous paginated ListEksAnywhereSubscriptions request where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value.

Request Body

The request does not have a request body.

Response Syntax

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

{
    "nextToken": "string",
    "subscriptions": [
        {
            "arn": "string",
            "autoRenew": boolean,
            "createdAt": number,
            "effectiveDate": number,
            "expirationDate": number,
            "id": "string",
            "licenseArns": [ "string" ],
            "licenseQuantity": number,
            "licenses": [
                {
                    "id": "string",
                    "token": "string"
                }
            ],
            "licenseType": "string",
            "status": "string",
            "tags": {
                "string" : "string"
            },
            "term": {
                "duration": number,
                "unit": "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 nextToken value to include in a future ListEksAnywhereSubscriptions request. When the results of a ListEksAnywhereSubscriptions request exceed maxResults, you can use this value to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

subscriptions

A list of all subscription objects in the region, filtered by includeStatus and paginated by nextToken and maxResults.

Type: Array of [EksAnywhereSubscription](#) objects

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidArgumentException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

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](#)

ListFargateProfiles

Service: Amazon Elastic Kubernetes Service

Lists the Amazon Fargate profiles associated with the specified cluster in your Amazon account in the specified Amazon Web Services Region.

Request Syntax

```
GET /clusters/name/fargate-profiles?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[maxResults](#)

The maximum number of results, returned in paginated output. You receive maxResults in a single page, along with a nextToken response element. You can see the remaining results of the initial request by sending another request with the returned nextToken value. This value can be between 1 and 100. If you don't use this parameter, 100 results and a nextToken value, if applicable, are returned.

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

[nextToken](#)

The nextToken value returned from a previous paginated request, where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Request Body

The request does not have a request body.

Response Syntax

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

{
    "fargateProfileNames": [ "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.

fargateProfileNames

A list of all of the Fargate profiles associated with the specified cluster.

Type: Array of strings

nextToken

The nextToken value returned from a previous paginated request, where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Type: String

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example lists the Fargate profiles in the `my-cluster` cluster.

Sample Request

```
GET /clusters/my-cluster/fargate-profiles HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.284 Python/3.7.5 Darwin/18.7.0 botocore/1.13.20
X-Amz-Date: 20191120T210416Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 20 Nov 2019 21:04:16 GMT
Content-Type: application/json
Content-Length: 91
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: DeeMiFxHvHcFd3g=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
    "fargateProfileNames": [
        "default-with-infrastructure-label",
        "monitoring"
    ],
    "nextToken": null
}
```

See Also

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

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

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

ListIdentityProviderConfigs

Service: Amazon Elastic Kubernetes Service

Lists the identity provider configurations for your cluster.

Request Syntax

```
GET /clusters/name/identity-provider-configs?maxResults=maxResults&nextToken=nextToken
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[maxResults](#)

The maximum number of results, returned in paginated output. You receive `maxResults` in a single page, along with a `nextToken` response element. You can see the remaining results of the initial request by sending another request with the returned `nextToken` value. This value can be between 1 and 100. If you don't use this parameter, 100 results and a `nextToken` value, if applicable, are returned.

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

[nextToken](#)

The `nextToken` value returned from a previous paginated request, where `maxResults` was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the `nextToken` value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Request Body

The request does not have a request body.

Response Syntax

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

{
    "identityProviderConfigs": [
        {
            "name": "string",
            "type": "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.

identityProviderConfigs

The identity provider configurations for the cluster.

Type: Array of [IdentityProviderConfig](#) objects

nextToken

The nextToken value to include in a future `ListIdentityProviderConfigsResponse` request. When the results of a `ListIdentityProviderConfigsResponse` request exceed `maxResults`, you can use this value to retrieve the next page of results. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Type: String

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example lists the identity provider configs for a cluster.

Sample Request

```
GET /clusters/my-cluster/identity-provider-configs HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.298 Python/3.6.0 Windows/10 botocore/1.13.34
X-Amz-Date: 20201215T203618Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 15 Dec 2020 20:36:18 GMT
Content-Type: application/json
Content-Length: 81
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: XnGqaHs7vHcFb1g=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "identityProviderConfigs": [
    {
      "type": "oidc",
      "name": "my-config"
    }
  ],
  "nextToken": null
}
```

See Also

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

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

ListInsights

Service: Amazon Elastic Kubernetes Service

Returns a list of all insights checked for against the specified cluster. You can filter which insights are returned by category, associated Kubernetes version, and status. The default filter lists all categories and every status.

The following lists the available categories:

- UPGRADE_READINESS: Amazon EKS identifies issues that could impact your ability to upgrade to new versions of Kubernetes. These are called upgrade insights.
- MISCONFIGURATION: Amazon EKS identifies misconfiguration in your EKS Hybrid Nodes setup that could impair functionality of your cluster or workloads. These are called configuration insights.

Request Syntax

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

{
  "filtercategoriesstring" ],
    "kubernetesVersionsstring" ],
    "statusesstring" ]
  },
  "maxResultsnumber,
  "nextTokenstring"
}
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of the Amazon EKS cluster associated with the insights.

Required: Yes

Request Body

The request accepts the following data in JSON format.

filter

The criteria to filter your list of insights for your cluster. You can filter which insights are returned by category, associated Kubernetes version, and status.

Type: [InsightsFilter](#) object

Required: No

maxResults

The maximum number of identity provider configurations returned by `ListInsights` in paginated output. When you use this parameter, `ListInsights` returns only `maxResults` results in a single page along with a `nextToken` response element. You can see the remaining results of the initial request by sending another `ListInsights` request with the returned `nextToken` value. This value can be between 1 and 100. If you don't use this parameter, `ListInsights` returns up to 100 results and a `nextToken` value, if applicable.

Type: Integer

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

Required: No

nextToken

The `nextToken` value returned from a previous paginated `ListInsights` request. When the results of a `ListInsights` request exceed `maxResults`, you can use this value to retrieve the next page of results. This value is `null` when there are no more results to return.

Type: String

Required: No

Response Syntax

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

```
{  
  "insights": [  
    {  
      "category": "string",  
      "description": "string",  
      "id": "string",  
      "insightStatus": {  
        "reason": "string",  
        "status": "string"  
      },  
      "kubernetesVersion": "string",  
      "lastRefreshTime": number,  
      "lastTransitionTime": number,  
      "name": "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.

insights

The returned list of insights.

Type: Array of [InsightSummary](#) objects

nextToken

The nextToken value to include in a future `ListInsights` request. When the results of a `ListInsights` request exceed `maxResults`, you can use this value to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Errors

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

InvalidOperationException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

See Also

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

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

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

ListNodegroups

Service: Amazon Elastic Kubernetes Service

Lists the managed node groups associated with the specified cluster in your Amazon account in the specified Amazon Web Services Region. Self-managed node groups aren't listed.

Request Syntax

```
GET /clusters/name/node-groups?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[maxResults](#)

The maximum number of results, returned in paginated output. You receive `maxResults` in a single page, along with a `nextToken` response element. You can see the remaining results of the initial request by sending another request with the returned `nextToken` value. This value can be between 1 and 100. If you don't use this parameter, 100 results and a `nextToken` value, if applicable, are returned.

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

[nextToken](#)

The `nextToken` value returned from a previous paginated request, where `maxResults` was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the `nextToken` value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Request Body

The request does not have a request body.

Response Syntax

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

{
    "nextToken": "string",
    "nodegroups": [ "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 nextToken value returned from a previous paginated request, where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value. This value is null when there are no more results to return.

 **Note**

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Type: String

nodegroups

A list of all of the node groups associated with the specified cluster.

Type: Array of strings

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

This example lists all of the managed node groups that are associated with the `my-cluster` cluster.

Sample Request

```
GET /clusters/my-cluster/node-groups HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.275 Python/3.7.4 Darwin/18.7.0 botocore/1.13.11
X-Amz-Date: 20191111T183756Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Mon, 11 Nov 2019 18:37:56 GMT
Content-Type: application/json
Content-Length: 50
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: DAeUrHtPPHcFU_A=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
    "nodegroups": [
        "gpu",
        "standard"
    ],
    "nextToken": null
}
```

See Also

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

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

ListPodIdentityAssociations

Service: Amazon Elastic Kubernetes Service

List the EKS Pod Identity associations in a cluster. You can filter the list by the namespace that the association is in or the service account that the association uses.

Request Syntax

```
GET /clusters/name/pod-identity-associations?  
maxResults=maxResults&namespace=namespace&nextToken=nextToken&serviceAccount=serviceAccount  
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of the cluster that the associations are in.

Required: Yes

[maxResults](#)

The maximum number of EKS Pod Identity association results returned by `ListPodIdentityAssociations` in paginated output. When you use this parameter, `ListPodIdentityAssociations` returns only `maxResults` results in a single page along with a `nextToken` response element. You can see the remaining results of the initial request by sending another `ListPodIdentityAssociations` request with the returned `nextToken` value. This value can be between 1 and 100. If you don't use this parameter, `ListPodIdentityAssociations` returns up to 100 results and a `nextToken` value if applicable.

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

[namespace](#)

The name of the Kubernetes namespace inside the cluster that the associations are in.

[nextToken](#)

The nextToken value returned from a previous paginated ListUpdates request where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value.

 **Note**

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

[serviceAccount](#)

The name of the Kubernetes service account that the associations use.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "associations": [
    {
      "associationArn": "string",
      "associationId": "string",
      "clusterName": "string",
      "namespace": "string",
      "ownerArn": "string",
      "serviceAccount": "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.

associations

The list of summarized descriptions of the associations that are in the cluster and match any filters that you provided.

Each summary is simplified by removing these fields compared to the full

[PodIdentityAssociation](#):

- The IAM role: `roleArn`
- The timestamp that the association was created at: `createdAt`
- The most recent timestamp that the association was modified at: `modifiedAt`
- The tags on the association: `tags`

Type: Array of [PodIdentityAssociationSummary](#) objects

nextToken

The `nextToken` value to include in a future `ListPodIdentityAssociations` request. When the results of a `ListPodIdentityAssociations` request exceed `maxResults`, you can use this value to retrieve the next page of results. This value is null when there are no more results to return.

 **Note**

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Type: String

Errors

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

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

See Also

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

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

List the tags for an Amazon EKS resource.

Request Syntax

```
GET /tags/resourceArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[resourceArn](#)

The Amazon Resource Name (ARN) that identifies the resource to list tags for.

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 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.

Value Length Constraints: Maximum length of 256.

Errors

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

BadRequestException

This exception is thrown if the request contains a semantic error. The precise meaning will depend on the API, and will be documented in the error message.

HTTP Status Code: 400

NotFoundException

A service resource associated with the request could not be found. Clients should not retry such requests.

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](#)

ListUpdates

Service: Amazon Elastic Kubernetes Service

Lists the updates associated with an Amazon EKS resource in your Amazon account, in the specified Amazon Web Services Region.

Request Syntax

```
GET /clusters/name/updates?  
addonName=addonName&maxResults=maxResults&nextToken=nextToken&nodegroupName=nodegroupName  
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

addonName

The names of the installed add-ons that have available updates.

maxResults

The maximum number of results, returned in paginated output. You receive maxResults in a single page, along with a nextToken response element. You can see the remaining results of the initial request by sending another request with the returned nextToken value. This value can be between 1 and 100. If you don't use this parameter, 100 results and a nextToken value, if applicable, are returned.

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

name

The name of the Amazon EKS cluster to list updates for.

Required: Yes

nextToken

The nextToken value returned from a previous paginated request, where maxResults was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the nextToken value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

[nodegroupName](#)

The name of the Amazon EKS managed node group to list updates for.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "nextTokenstring",
  "updateIdsstring" \\]
}
```

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 `nextToken` value returned from a previous paginated request, where `maxResults` was used and the results exceeded the value of that parameter. Pagination continues from the end of the previous results that returned the `nextToken` value. This value is null when there are no more results to return.

Note

This token should be treated as an opaque identifier that is used only to retrieve the next items in a list and not for other programmatic purposes.

Type: String

updateIds

A list of all the updates for the specified cluster and Region.

Type: Array of strings

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example lists all updates that are associated with the my-cluster cluster.

Sample Request

```
GET /clusters/my-cluster/updates HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.56 Python/3.7.0 Darwin/17.7.0 botocore/1.12.46
X-Amz-Date: 20181129T172901Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 29 Nov 2018 17:29:01 GMT
Content-Type: application/json
Content-Length: 71
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: RIo6pF2NPHcF5PQ=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "updateIds": ["9f771284-9e30-4886-b5b1-3789b6bea4dc"],
  "nextToken": null
}
```

{}

See Also

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

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

RegisterCluster

Service: Amazon Elastic Kubernetes Service

Connects a Kubernetes cluster to the Amazon EKS control plane.

Any Kubernetes cluster can be connected to the Amazon EKS control plane to view current information about the cluster and its nodes.

Cluster connection requires two steps. First, send a [RegisterClusterRequest](#) to add it to the Amazon EKS control plane.

Second, a [Manifest](#) containing the activationID and activationCode must be applied to the Kubernetes cluster through it's native provider to provide visibility.

After the manifest is updated and applied, the connected cluster is visible to the Amazon EKS control plane. If the manifest isn't applied within three days, the connected cluster will no longer be visible and must be deregistered using [DeregisterCluster](#).

Request Syntax

```
POST /cluster-registrations HTTP/1.1
Content-type: application/json

{
  "clientRequestToken": "string",
  "connectorConfig": {
    "provider": "string",
    "roleArn": "string"
  },
  "name": "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.

[clientRequestToken](#)

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

[connectorConfig](#)

The configuration settings required to connect the Kubernetes cluster to the Amazon EKS control plane.

Type: [ConnectorConfigRequest](#) object

Required: Yes

[name](#)

A unique name for this cluster in your Amazon Web Services Region.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^[0-9A-Za-z][A-Za-z0-9\-_]*

Required: Yes

[tags](#)

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

Response Syntax

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

{
  "cluster": {
    "accessConfig": {
      "authenticationMode": "string",
      "bootstrapClusterCreatorAdminPermissions": boolean
    },
    "arn": "string",
    "certificateAuthority": {
      "data": "string"
    },
    "clientRequestToken": "string",
    "computeConfig": {
      "enabled": boolean,
      "nodePools": [ "string" ],
      "nodeRoleArn": "string"
    },
    "connectorConfig": {
      "activationCode": "string",
      "activationExpiry": number,
      "activationId": "string",
      "provider": "string",
      "roleArn": "string"
    },
    "createdAt": number,
    "encryptionConfig": [
      {
        "provider": {
          "keyArn": "string"
        },
        "resources": [ "string" ]
      }
    ],
    "endpoint": "string",
    "health": {
      "issues": [
        {
          "code": "string",
          "message": "string",
        }
      ]
    }
  }
}
```

```
        "resourceIds": [ "string" ]
    }
]
},
"id": "string",
"identity": {
    "oidc": {
        "issuer": "string"
    }
},
"kubernetesNetworkConfig": {
    "elasticLoadBalancing": {
        "enabled": boolean
    },
    "ipFamily": "string",
    "serviceIpv4Cidr": "string",
    "serviceIpv6Cidr": "string"
},
"logging": {
    "clusterLogging": [
        {
            "enabled": boolean,
            "types": [ "string" ]
        }
    ]
},
"name": "string",
"outpostConfig": {
    "controlPlaneInstanceType": "string",
    "controlPlanePlacement": {
        "groupName": "string"
    },
    "outpostArns": [ "string" ]
},
"platformVersion": "string",
"remoteNetworkConfig": {
    "remoteNodeNetworks": [
        {
            "cidrs": [ "string" ]
        }
    ],
    "remotePodNetworks": [
        {
            "cidrs": [ "string" ]
        }
    ]
}
```

```
        }
    ],
},
"resourcesVpcConfig": {
    "clusterSecurityGroupId": "string",
    "endpointPrivateAccess": boolean,
    "endpointPublicAccess": boolean,
    "publicAccessCidrs": [ "string" ],
    "securityGroupIds": [ "string" ],
    "subnetIds": [ "string" ],
    "vpcId": "string"
},
"roleArn": "string",
"status": "string",
"storageConfig": {
    "blockStorage": {
        "enabled": boolean
    }
},
"tags": {
    "string" : "string"
},
"upgradePolicy": {
    "supportType": "string"
},
"version": "string",
"zonalShiftConfig": {
    "enabled": 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.

cluster

An object representing an Amazon EKS cluster.

Type: [Cluster object](#)

Errors

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

AccessDeniedException

You don't have permissions to perform the requested operation. The [IAM principal](#) making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see [Access management](#) in the *IAM User Guide*.

HTTP Status Code: 403

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidArgumentException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

HTTP Status Code: 400

ResourcePropagationDelayException

Required resources (such as service-linked roles) were created and are still propagating. Retry later.

HTTP Status Code: 428

ServerErrorException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example connects a Kubernetes cluster named my-api-created-external-cluster.

Sample Request

```
POST /clusters HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.120 Python/3.7.0 Darwin/18.2.0 botocore/1.12.110
X-Amz-Date: 20190322T160158Z
Authorization: AUTHPARAMS
Content-Length: 368

{
    "name": "my-api-created-external-cluster",
    "connectorConfig": {
```

```
        "roleArn": "arn:aws:iam::ACCOUNT_ID:role/eks-connector-agent",
        "provider" : "OTHER"
    }
}
```

See Also

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

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

Associates the specified tags to an Amazon EKS resource with the specified `resourceArn`. If existing tags on a resource are not specified in the request parameters, they aren't changed. When a resource is deleted, the tags associated with that resource are also deleted. Tags that you create for Amazon EKS resources don't propagate to any other resources associated with the cluster. For example, if you tag a cluster with this operation, that tag doesn't automatically propagate to the subnets and nodes associated with the cluster.

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 Amazon Resource Name (ARN) of the resource to add tags to.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[tags](#)

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: 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

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

BadRequestException

This exception is thrown if the request contains a semantic error. The precise meaning will depend on the API, and will be documented in the error message.

HTTP Status Code: 400

NotFoundException

A service resource associated with the request could not be found. Clients should not retry such requests.

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 Elastic Kubernetes Service

Deletes specified tags from an Amazon EKS resource.

Request Syntax

```
DELETE /tags/resourceArn?tagKeys=tagKeys HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The Amazon Resource Name (ARN) of the resource to delete tags from.

Required: Yes

tagKeys

The keys of the tags to remove.

Array Members: Minimum number of 1 item. 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

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

BadRequestException

This exception is thrown if the request contains a semantic error. The precise meaning will depend on the API, and will be documented in the error message.

HTTP Status Code: 400

NotFoundException

A service resource associated with the request could not be found. Clients should not retry such requests.

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](#)

UpdateAccessEntry

Service: Amazon Elastic Kubernetes Service

Updates an access entry.

Request Syntax

```
POST /clusters/name/access-entries/principalArn HTTP/1.1
Content-type: application/json

{
  "clientRequestToken": "string",
  "kubernetesGroups": [ "string" ],
  "username": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[principalArn](#)

The ARN of the IAM principal for the AccessEntry.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[clientRequestToken](#)

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

kubernetesGroups

The value for name that you've specified for kind: Group as a subject in a Kubernetes RoleBinding or ClusterRoleBinding object. Amazon EKS doesn't confirm that the value for name exists in any bindings on your cluster. You can specify one or more names.

Kubernetes authorizes the principalArn of the access entry to access any cluster objects that you've specified in a Kubernetes Role or ClusterRole object that is also specified in a binding's roleRef. For more information about creating Kubernetes RoleBinding, ClusterRoleBinding, Role, or ClusterRole objects, see [Using RBAC Authorization in the Kubernetes documentation](#).

If you want Amazon EKS to authorize the principalArn (instead of, or in addition to Kubernetes authorizing the principalArn), you can associate one or more access policies to the access entry using AssociateAccessPolicy. If you associate any access policies, the principalARN has all permissions assigned in the associated access policies and all permissions in any Kubernetes Role or ClusterRole objects that the group names are bound to.

Type: Array of strings

Required: No

username

The username to authenticate to Kubernetes with. We recommend not specifying a username and letting Amazon EKS specify it for you. For more information about the value Amazon EKS specifies for you, or constraints before specifying your own username, see [Creating access entries in the Amazon EKS User Guide](#).

Type: String

Required: No

Response Syntax

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

{
```

```
"accessEntry": {  
    "accessEntryArn    "clusterName": "string",  
    "createdAt": number,  
    "kubernetesGroups": [ "string" ],  
    "modifiedAt": number,  
    "principalArn": "string",  
    "tags": {  
        "string" : "string"  
    },  
    "type": "string",  
    "username": "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.

accessEntry

The ARN of the IAM principal for the AccessEntry.

Type: [AccessEntry](#) object

Errors

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

InvalidArgumentException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example updates an access entry by adding a value for `kubernetesGroups`.

Sample Request

```
POST /clusters/my-cluster/access-entries/arn%3Aaws%3Aiam%3A%3A012345678910%3Arole%2Fmy-role HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Type: application/json
User-Agent: aws-cli/2.9.0 Python/3.9.11 Windows/10 exe/AMD64 prompt/off command/eks.update-access-entry
X-Amz-Date: 20230531T132743Z
Authorization: AUTHPARAMS
Content-Length: 107
```

```
{  
  "kubernetesGroups": ["my-kubernetes-group"],  
  "clientRequestToken": "x111xxx1-111x-11xx-xxx1-x11x1111xxx1"  
}
```

Sample Response

```
HTTP/1.1 200 OK  
Date: Wed, 31 May 2023 13:27:45 GMT  
Content-Type: application/json  
Content-Length: 507  
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx  
Access-Control-Allow-Origin: *  
Access-Control-Allow-Headers: *,Authorization,Date,X-Amz-Date,X-Amz-Security-Token,X-Amz-Target,content-type,x-amz-content-sha256,x-amz-user-agent,x-amzn-platform-id,x-amzn-trace-id  
x-amz-apigw-id: Fyi0rHRUPHcFyTA=  
Access-Control-Allow-Methods: GET,HEAD,PUT,POST,DELETE,OPTIONS  
Access-Control-Expose-Headers: x-amzn-errortype,x-amzn-errormessage,x-amzn-trace-id,x-amzn-requestid,x-amz-apigw-id,date  
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx  
Connection: keep-alive  
  
{  
  "accessEntry": {  
    "clusterName": "my-cluster",  
    "principalArn": "arn:aws:iam::012345678910:role/my-role",  
    "kubernetesGroups": ["my-kubernetes-group"],  
    "accessEntryArn": "arn:aws:eks:us-west-2:012345678910:accessEntry/my-cluster/role/012345678910/my-role/fec43712-ee5b-dd95-5f88-edb855c578b2",  
    "createdAt": 1.685475163532E9,  
    "modifiedAt": 1.685539665508E9,  
    "tags": {},  
    "username": "arn:aws:sts::012345678910:assumed-role/my-role/{{SessionName}}",  
    "type": "STANDARD"  
  }  
}
```

See Also

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

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

UpdateAddon

Service: Amazon Elastic Kubernetes Service

Updates an Amazon EKS add-on.

Request Syntax

```
POST /clusters/name/addons/addonName/update HTTP/1.1
Content-type: application/json

{
  "addonVersionclientRequestTokenconfigurationValuespodIdentityAssociationsroleArnserviceAccountresolveConflictsserviceAccountRoleArn
```

URI Request Parameters

The request uses the following URI parameters.

addonName

The name of the add-on. The name must match one of the names returned by [ListAddons](#).

Required: Yes

name

The name of your cluster.

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^[0-9A-Za-z][A-Za-z0-9\-_]*

Required: Yes

Request Body

The request accepts the following data in JSON format.

addonVersion

The version of the add-on. The version must match one of the versions returned by [DescribeAddonVersions](#).

Type: String

Required: No

clientRequestToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

configurationValues

The set of configuration values for the add-on that's created. The values that you provide are validated against the schema returned by [DescribeAddonConfiguration](#).

Type: String

Required: No

podIdentityAssociations

An array of EKS Pod Identity associations to be updated. Each association maps a Kubernetes service account to an IAM role. If this value is left blank, no change. If an empty array is provided, existing associations owned by the add-on are deleted.

For more information, see [Attach an IAM Role to an Amazon EKS add-on using EKS Pod Identity](#) in the *Amazon EKS User Guide*.

Type: Array of [AddonPodIdentityAssociations](#) objects

Required: No

resolveConflicts

How to resolve field value conflicts for an Amazon EKS add-on if you've changed a value from the Amazon EKS default value. Conflicts are handled based on the option you choose:

- **None** – Amazon EKS doesn't change the value. The update might fail.
- **Overwrite** – Amazon EKS overwrites the changed value back to the Amazon EKS default value.
- **Preserve** – Amazon EKS preserves the value. If you choose this option, we recommend that you test any field and value changes on a non-production cluster before updating the add-on on your production cluster.

Type: String

Valid Values: OVERWRITE | NONE | PRESERVE

Required: No

serviceAccountRoleArn

The Amazon Resource Name (ARN) of an existing IAM role to bind to the add-on's service account. The role must be assigned the IAM permissions required by the add-on. If you don't specify an existing IAM role, then the add-on uses the permissions assigned to the node IAM role. For more information, see [Amazon EKS node IAM role](#) in the *Amazon EKS User Guide*.

 **Note**

To specify an existing IAM role, you must have an IAM OpenID Connect (OIDC) provider created for your cluster. For more information, see [Enabling IAM roles for service accounts on your cluster](#) in the *Amazon EKS User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

Response Syntax

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

{
```

```
"update": {
    "createdAt": number,
    "errors": [
        {
            "errorCode": "string",
            "errorMessage": "string",
            "resourceIds": [ "string" ]
        }
    ],
    "id": "string",
    "params": [
        {
            "type": "string",
            "value": "string"
        }
    ],
    "status": "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.

update

An object representing an asynchronous update.

Type: [Update object](#)

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that

you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example updates an add-on named `vpc-cni` to use an IAM role named `AmazonEKSCNIRole` and to overwrite the add-on's existing configuration with the Amazon EKS add-on's configuration.

Sample Request

```
POST /clusters/my-cluster/addons/vpc-cni/update HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.298 Python/3.6.0 Windows/10 botocore/1.13.34
X-Amz-Date: 20201125T145528Z
Authorization: AUTHPARAMS

{
  "serviceAccountRoleArn": "arn:aws:iam::012345678910:role/AmazonEKSCNIRole",
  "resolveConflicts": "overwrite",
  "clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 25 Nov 2020 14:55:29 GMT
Content-Type: application/json
Content-Length: 288
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: WkZ_KGiBvHcFhtw=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "update": {
    "id": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
    "status": "InProgress",
    "type": "AddonUpdate",
    "params": [
      {
        "type": "ServiceAccountRoleArn",
        "value": "arn:aws:iam::012345678910:role/AmazonEKSCNIRole"
    
```

```
  },
  "type": "ResolveConflicts",
  "value": "overwrite"
],
"createdAt": 1606316129.051,
"errors": []
}
}
```

See Also

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

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

UpdateClusterConfig

Service: Amazon Elastic Kubernetes Service

Updates an Amazon EKS cluster configuration. Your cluster continues to function during the update. The response output includes an update ID that you can use to track the status of your cluster update with [DescribeUpdate](#).

You can use this operation to do the following actions:

- You can use this API operation to enable or disable exporting the Kubernetes control plane logs for your cluster to CloudWatch Logs. By default, cluster control plane logs aren't exported to CloudWatch Logs. For more information, see [Amazon EKS Cluster control plane logs](#) in the Amazon EKS User Guide .

 **Note**

CloudWatch Logs ingestion, archive storage, and data scanning rates apply to exported control plane logs. For more information, see [CloudWatch Pricing](#).

- You can also use this API operation to enable or disable public and private access to your cluster's Kubernetes API server endpoint. By default, public access is enabled, and private access is disabled. For more information, see [Cluster API server endpoint](#) in the Amazon EKS User Guide .
- You can also use this API operation to choose different subnets and security groups for the cluster. You must specify at least two subnets that are in different Availability Zones. You can't change which VPC the subnets are from, the subnets must be in the same VPC as the subnets that the cluster was created with. For more information about the VPC requirements, see https://docs.amazonaws.cn/eks/latest/userguide/network_reqs.html in the Amazon EKS User Guide .
- You can also use this API operation to enable or disable ARC zonal shift. If zonal shift is enabled, Amazon configures zonal autoshift for the cluster.
- You can also use this API operation to add, change, or remove the configuration in the cluster for EKS Hybrid Nodes. To remove the configuration, use the `remoteNetworkConfig` key with an object containing both subkeys with empty arrays for each. Here is an inline example:
`"remoteNetworkConfig": { "remoteNodeNetworks": [], "remotePodNetworks": [] }`.

Cluster updates are asynchronous, and they should finish within a few minutes. During an update, the cluster status moves to UPDATING (this status transition is eventually consistent). When the update is complete (either Failed or Successful), the cluster status moves to Active.

Request Syntax

```
POST /clusters/name/update-config HTTP/1.1
Content-type: application/json
```

```
{
  "accessConfigauthenticationModestring"
  },
  "clientRequestTokenstring",
  "computeConfigenabledboolean,
    "nodePoolsstring" ],
    "nodeRoleArnstring"
  },
  "kubernetesNetworkConfigelasticLoadBalancingenabledboolean
    },
    "ipFamilystring",
    "serviceIpv4Cidrstring"
  },
  "loggingclusterLoggingenabledboolean,
        "typesstring" ]
      }
    ]
  },
  "remoteNetworkConfigremoteNodeNetworkscidsstring" ]
      }
    ],
    "remotePodNetworkscidsstring" ]
      }
    ]
  }
}
```

```
        }
    ],
},
"resourcesVpcConfig": {
    "endpointPrivateAccess": boolean,
    "endpointPublicAccess": boolean,
    "publicAccessCidrs": [ "string" ],
    "securityGroupIds": [ "string" ],
    "subnetIds": [ "string" ]
},
"storageConfig": {
    "blockStorage": {
        "enabled": boolean
    }
},
"upgradePolicy": {
    "supportType": "string"
},
"zonalShiftConfig": {
    "enabled": boolean
}
}
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of the Amazon EKS cluster to update.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[accessConfig](#)

The access configuration for the cluster.

Type: [UpdateAccessConfigRequest](#) object

Required: No

[clientRequestToken](#)

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

[computeConfig](#)

Update the configuration of the compute capability of your EKS Auto Mode cluster. For example, enable the capability.

Type: [ComputeConfigRequest](#) object

Required: No

[kubernetesNetworkConfig](#)

The Kubernetes network configuration for the cluster.

Type: [KubernetesNetworkConfigRequest](#) object

Required: No

[logging](#)

Enable or disable exporting the Kubernetes control plane logs for your cluster to CloudWatch Logs . By default, cluster control plane logs aren't exported to CloudWatch Logs . For more information, see [Amazon EKS cluster control plane logs](#) in the [Amazon EKS User Guide](#) .

 **Note**

CloudWatch Logs ingestion, archive storage, and data scanning rates apply to exported control plane logs. For more information, see [CloudWatch Pricing](#).

Type: [Logging](#) object

Required: No

remoteNetworkConfig

The configuration in the cluster for EKS Hybrid Nodes. You can add, change, or remove this configuration after the cluster is created.

Type: [RemoteNetworkConfigRequest](#) object

Required: No

resourcesVpcConfig

An object representing the VPC configuration to use for an Amazon EKS cluster.

Type: [VpcConfigRequest](#) object

Required: No

storageConfig

Update the configuration of the block storage capability of your EKS Auto Mode cluster. For example, enable the capability.

Type: [StorageConfigRequest](#) object

Required: No

upgradePolicy

You can enable or disable extended support for clusters currently on standard support. You cannot disable extended support once it starts. You must enable extended support before your cluster exits standard support.

Type: [UpgradePolicyRequest](#) object

Required: No

zonalShiftConfig

Enable or disable ARC zonal shift for the cluster. If zonal shift is enabled, Amazon configures zonal autoshift for the cluster.

Zonal shift is a feature of Amazon Application Recovery Controller (ARC). ARC zonal shift is designed to be a temporary measure that allows you to move traffic for a resource away from

an impaired AZ until the zonal shift expires or you cancel it. You can extend the zonal shift if necessary.

You can start a zonal shift for an EKS cluster, or you can allow Amazon to do it for you by enabling *zonal autoshift*. This shift updates the flow of east-to-west network traffic in your cluster to only consider network endpoints for Pods running on worker nodes in healthy AZs. Additionally, any ALB or NLB handling ingress traffic for applications in your EKS cluster will automatically route traffic to targets in the healthy AZs. For more information about zonal shift in EKS, see [Learn about Amazon Application Recovery Controller \(ARC\) Zonal Shift in Amazon EKS](#) in the Amazon EKS User Guide .

Type: [ZonalShiftConfigRequest](#) object

Required: No

Response Syntax

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

{
  "update": {
    "createdAt": number,
    "errors": [
      {
        "errorCode": "string",
        "errorMessage": "string",
        "resourceIds": [ "string" ]
      }
    ],
    "id": "string",
    "params": [
      {
        "type": "string",
        "value": "string"
      }
    ],
    "status": "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.

[update](#)

An object representing an asynchronous update.

Type: [Update](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ThrottlingException

The request or operation couldn't be performed because a service is throttling requests.

HTTP Status Code: 429

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example disables the Amazon EKS public API server endpoint for the `my-cluster` cluster.

Sample Request

```
POST /clusters/my-cluster/update-config HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.56 Python/3.7.0 Darwin/17.7.0 botocore/1.12.46
X-Amz-Date: 20190228T215632Z
```

Authorization: AUTHPARAMS

```
{  
  "resourcesVpcConfig": {  
    "endpointPublicAccess": false  
  },  
  "clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"  
}
```

Sample Response

```
HTTP/1.1 200 OK  
Date: Thu, 28 Feb 2019 21:56:33 GMT  
Content-Type: application/json  
Content-Length: 254  
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx  
x-amz-apigw-id: V1LanEMJPHcFvTg=  
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx  
Connection: keep-alive  
  
{  
  "update": {  
    "id": "71abb011-b524-4983-b17f-c30baa1b5530",  
    "status": "InProgress",  
    "type": "EndpointAccessUpdate",  
    "params": [  
      {  
        "type": "EndpointPublicAccess",  
        "value": "false"  
      },  
      {  
        "type": "EndpointPrivateAccess",  
        "value": "true"  
      }  
    ],  
    "createdAt": 1551390993.374,  
    "errors": []  
  }  
}
```

Example

The following example enables exporting all cluster control plane logs to CloudWatch Logs.

Sample Request

```
POST /clusters/my-cluster/update-config HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.120 Python/3.7.0 Darwin/18.2.0 botocore/1.12.110
X-Amz-Date: 20190322T162335Z
Authorization: AUTHPARAMS

{
  "logging": {
    "clusterLogging": [
      {
        "types": [
          "api",
          "audit",
          "authenticator",
          "controllerManager",
          "scheduler"
        ],
        "enabled": true
      }
    ]
  },
  "clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Fri, 22 Mar 2019 16:23:34 GMT
Content-Type: application/json
Content-Length: 313
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: W87Q5HlCvHcFxDA=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "update": {
    "id": "883405c8-65c6-4758-8cee-2a7c1340a6d9",
    "status": "InProgress",
    "type": "LoggingUpdate",
```

```
"params": [
  {
    "type": "ClusterLogging",
    "value": "{\"clusterLogging\": [{\"types\": [\"api\", \"audit\", \"authenticator\", \"controllerManager\", \"scheduler\"], \"enabled\": true}]}"
  }
],
"createdAt": 1553271814.684,
"errors": []
}
```

See Also

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

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

UpdateClusterVersion

Service: Amazon Elastic Kubernetes Service

Updates an Amazon EKS cluster to the specified Kubernetes version. Your cluster continues to function during the update. The response output includes an update ID that you can use to track the status of your cluster update with the [DescribeUpdate](#) API operation.

Cluster updates are asynchronous, and they should finish within a few minutes. During an update, the cluster status moves to UPDATING (this status transition is eventually consistent). When the update is complete (either Failed or Successful), the cluster status moves to Active.

If your cluster has managed node groups attached to it, all of your node groups' Kubernetes versions must match the cluster's Kubernetes version in order to update the cluster to a new Kubernetes version.

Request Syntax

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

{
  "clientRequestTokenforceversion
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of the Amazon EKS cluster to update.

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientRequestToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

force

Set this value to true to override upgrade-blocking readiness checks when updating a cluster.

Type: Boolean

Required: No

version

The desired Kubernetes version following a successful update.

Type: String

Required: Yes

Response Syntax

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

{
  "update": {
    "createdAt": number,
    "errors": [
      {
        "errorCode": "string",
        "errorMessage": "string",
        "resourceIds": [ "string" ]
      }
    ],
    "id": "string",
    "params": [
      {
        "type": "string",
        "value": "string"
      }
    ]
  }
}
```

```
        }
    ],
    "status": "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.

[update](#)

The full description of the specified update

Type: [Update object](#)

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

InvalidStateException

Amazon EKS detected upgrade readiness issues. Call the [ListInsights](#) API to view detected upgrade blocking issues. Pass the [`force`](#) flag when updating to override upgrade readiness errors.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with [ListClusters](#). You can view your available managed node groups with [ListNodegroups](#). Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerErrorException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

ThrottlingException

The request or operation couldn't be performed because a service is throttling requests.

HTTP Status Code: 429

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that

you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example updates the `devel` cluster to Kubernetes version 1.11.

Sample Request

```
POST /clusters/devel/updates HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.56 Python/3.7.0 Darwin/17.7.0 botocore/1.12.46
X-Amz-Date: 20181129T172834Z
Authorization: AUTHPARAMS

{
  "version": "1.11",
  "clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 29 Nov 2018 17:28:35 GMT
Content-Type: application/json
Content-Length: 228
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: RIo2bEs8vHcFXoA=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "update": {
    "errors": [],
    "params": [
      {
        "value": "1.11",
        "type": "Version"
      },
      {
        "value": "eks.1",
        "type": "PlatformVersion"
      }
    ],
    "status": "InProgress",
  }
}
```

```
"id": "9f771284-9e30-4886-b5b1-3789b6bea4dc",  
"createdAt": 1543512515.848,  
"type": "VersionUpdate"  
}  
}
```

See Also

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

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

UpdateEksAnywhereSubscription

Service: Amazon Elastic Kubernetes Service

Update an EKS Anywhere Subscription. Only auto renewal and tags can be updated after subscription creation.

Request Syntax

```
POST /eks-anywhere-subscriptions/id HTTP/1.1
Content-type: application/json

{
  "autoRenew": boolean,
  "clientRequestToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

[id](#)

The ID of the subscription.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[autoRenew](#)

A boolean indicating whether or not to automatically renew the subscription.

Type: Boolean

Required: Yes

[clientRequestToken](#)

Unique, case-sensitive identifier to ensure the idempotency of the request.

Type: String

Required: No

Response Syntax

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

{
  "subscription": {
    "arn": "string",
    "autoRenew": boolean,
    "createdAt": number,
    "effectiveDate": number,
    "expirationDate": number,
    "id": "string",
    "licenseArns": [ "string" ],
    "licenseQuantity": number,
    "licenses": [
      {
        "id": "string",
        "token": "string"
      }
    ],
    "licenseType": "string",
    "status": "string",
    "tags": {
      "string" : "string"
    },
    "term": {
      "duration": number,
      "unit": "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.

subscription

The full description of the updated subscription.

Type: [EksAnywhereSubscription](#) object

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

See Also

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

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

UpdateNodegroupConfig

Service: Amazon Elastic Kubernetes Service

Updates an Amazon EKS managed node group configuration. Your node group continues to function during the update. The response output includes an update ID that you can use to track the status of your node group update with the [DescribeUpdate](#) API operation. You can update the Kubernetes labels and taints for a node group and the scaling and version update configuration.

Request Syntax

```
POST /clusters/name/node-groups/nodegroupName/update-config HTTP/1.1
Content-type: application/json
```

```
{
  "clientRequestTokenlabelsaddOrUpdateLabelsremoveLabelsnodeRepairConfigenabledscalingConfigdesiredSizemaxSizeminSizetaintsaddOrUpdateTaintseffectkeyvalueremoveTaintseffectkey
```

```
        "value": "string"
    }
],
},
"updateConfig": {
    "maxUnavailable": number,
    "maxUnavailablePercentage": number,
    "updateStrategy": "string"
}
}
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[nodegroupName](#)

The name of the managed node group to update.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[clientRequestToken](#)

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

[labels](#)

The Kubernetes labels to apply to the nodes in the node group after the update.

Type: [UpdateLabelsPayload](#) object

Required: No

[nodeRepairConfig](#)

The node auto repair configuration for the node group.

Type: [NodeRepairConfig](#) object

Required: No

[scalingConfig](#)

The scaling configuration details for the Auto Scaling group after the update.

Type: [NodegroupScalingConfig](#) object

Required: No

[taints](#)

The Kubernetes taints to be applied to the nodes in the node group after the update. For more information, see [Node taints on managed node groups](#).

Type: [UpdateTaintsPayload](#) object

Required: No

[updateConfig](#)

The node group update configuration.

Type: [NodegroupUpdateConfig](#) object

Required: No

Response Syntax

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

```
{
  "update": {
    "createdAt": number,
    "errors": [
      {
        "errorCode": "string",
```

```
        "errorMessage": "string",
        "resourceIds": [ "string" ]
    },
],
"id": "string",
"params": [
    {
        "type": "string",
        "value": "string"
    }
],
"status": "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.

[update](#)

An object representing an asynchronous update.

Type: [Update object](#)

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

Example

This example updates the scaling configuration for a node group called `standard` in the `my-cluster` cluster.

Sample Request

```
POST /clusters/my-cluster/node-groups/standard/update-config HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.275 Python/3.7.4 Darwin/18.7.0 botocore/1.13.11
X-Amz-Date: 20191111T202415Z
Authorization: AUTHPARAMS
Content-Length: 127
```

```
{  
  "scalingConfig": {  
    "minSize": 2,  
    "desiredSize": 4,  
    "maxSize": 6  
  },  
  "clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"  
}
```

Sample Response

```
HTTP/1.1 200 OK  
Date: Mon, 11 Nov 2019 20:24:16 GMT  
Content-Type: application/json  
Content-Length: 247  
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx  
x-amz-apigw-id: DAt5dGkFPHcFzuQ=  
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx  
Connection: keep-alive  
  
{  
  "update": {  
    "id": "4c6c3652-9c56-3c76-86e3-8a3930af1bae",  
    "status": "InProgress",  
    "type": "ConfigUpdate",  
    "params": [  
      {  
        "type": "MinSize",  
        "value": "2"  
      },  
      {  
        "type": "MaxSize",  
        "value": "6"  
      },  
      {  
        "type": "DesiredSize",  
        "value": "4"  
      }  
    ],  
    "createdAt": 1573503855.887,  
    "errors": []  
  }  
}
```

See Also

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

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

UpdateNodegroupVersion

Service: Amazon Elastic Kubernetes Service

Updates the Kubernetes version or AMI version of an Amazon EKS managed node group.

You can update a node group using a launch template only if the node group was originally deployed with a launch template. Additionally, the launch template ID or name must match what was used when the node group was created. You can update the launch template version with necessary changes.

If you need to update a custom AMI in a node group that was deployed with a launch template, then update your custom AMI, specify the new ID in a new version of the launch template, and then update the node group to the new version of the launch template.

If you update without a launch template, then you can update to the latest available AMI version of a node group's current Kubernetes version by not specifying a Kubernetes version in the request. You can update to the latest AMI version of your cluster's current Kubernetes version by specifying your cluster's Kubernetes version in the request. For information about Linux versions, see [Amazon EKS optimized Amazon Linux AMI versions](#) in the *Amazon EKS User Guide*. For information about Windows versions, see [Amazon EKS optimized Windows AMI versions](#) in the *Amazon EKS User Guide*.

You cannot roll back a node group to an earlier Kubernetes version or AMI version.

When a node in a managed node group is terminated due to a scaling action or update, every Pod on that node is drained first. Amazon EKS attempts to drain the nodes gracefully and will fail if it is unable to do so. You can force the update if Amazon EKS is unable to drain the nodes as a result of a Pod disruption budget issue.

Request Syntax

```
POST /clusters/name/node-groups/nodegroupName/update-version HTTP/1.1
Content-type: application/json
```

```
{
  "clientRequestTokenforcelaunchTemplateidname
```

```
    "version": "string"
},
"releaseVersion": "string",
"version": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

[name](#)

The name of your cluster.

Required: Yes

[nodegroupName](#)

The name of the managed node group to update.

Required: Yes

Request Body

The request accepts the following data in JSON format.

[clientRequestToken](#)

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

[force](#)

Force the update if any Pod on the existing node group can't be drained due to a Pod disruption budget issue. If an update fails because all Pods can't be drained, you can force the update after it fails to terminate the old node whether or not any Pod is running on the node.

Type: Boolean

Required: No

launchTemplate

An object representing a node group's launch template specification. You can only update a node group using a launch template if the node group was originally deployed with a launch template. When updating, you must specify the same launch template ID or name that was used to create the node group.

Type: [LaunchTemplateSpecification](#) object

Required: No

releaseVersion

The AMI version of the Amazon EKS optimized AMI to use for the update. By default, the latest available AMI version for the node group's Kubernetes version is used. For information about Linux versions, see [Amazon EKS optimized Amazon Linux AMI versions](#) in the *Amazon EKS User Guide*. Amazon EKS managed node groups support the November 2022 and later releases of the Windows AMIs. For information about Windows versions, see [Amazon EKS optimized Windows AMI versions](#) in the *Amazon EKS User Guide*.

If you specify `launchTemplate`, and your launch template uses a custom AMI, then don't specify `releaseVersion`, or the node group update will fail. For more information about using launch templates with Amazon EKS, see [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

Type: String

Required: No

version

The Kubernetes version to update to. If no version is specified, then the Kubernetes version of the node group does not change. You can specify the Kubernetes version of the cluster to update the node group to the latest AMI version of the cluster's Kubernetes version. If you specify `launchTemplate`, and your launch template uses a custom AMI, then don't specify `version`, or the node group update will fail. For more information about using launch templates with Amazon EKS, see [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

Type: String

Required: No

Response Syntax

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

{
  "update": {
    "createdAt": number,
    "errors": [
      {
        "errorCode": "string",
        "errorMessage": "string",
        "resourceIds": [ "string" ]
      }
    ],
    "id": "string",
    "params": [
      {
        "type": "string",
        "value": "string"
      }
    ],
    "status": "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.

update

An object representing an asynchronous update.

Type: [Update object](#)

Errors

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

ClientException

These errors are usually caused by a client action. Actions can include using an action or resource on behalf of an [IAM principal](#) that doesn't have permissions to use the action or resource or specifying an identifier that is not valid.

HTTP Status Code: 400

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with `ListClusters`. You can view your available managed node groups with `ListNodegroups`. Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example 1

This example updates a node group that was deployed without a launch template to the latest available node group AMI version for the node group's current Kubernetes version. The example node group is named standard and is in the prod cluster.

Sample Request

```
POST /clusters/prod/node-groups/standard/update-version HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.275 Python/3.7.4 Darwin/18.7.0 botocore/1.13.11
X-Amz-Date: 20191111T184043Z
Authorization: AUTHPARAMS
Content-Length: 62

{
  "clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Mon, 11 Nov 2019 18:40:43 GMT
Content-Type: application/json
Content-Length: 237
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: DAeuxEBkvHcF1sg=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "update": {
    "id": "079be772-956e-37c4-a966-960c1a6755a5",
    "status": "InProgress",
    "type": "VersionUpdate",
```

```
"params": [
  {
    "type": "Version",
    "value": "1.14"
  },
  {
    "type": "ReleaseVersion",
    "value": "1.14.7-20190927"
  }
],
"createdAt": 1573497643.374,
"errors": []
}
```

Example 2

This example updates a node group that was deployed with a launch template to version 3 of a launch template named my-launch-template.

Sample Request

```
POST /clusters/my-cluster/node-groups/my-nodegroup/update-version HTTP/1.1
Host: eks.us-west-2.amazonaws.com
Accept-Encoding: identity
User-Agent: aws-cli/1.16.298 Python/3.6.0 Windows/10 botocore/1.13.34
X-Amz-Date: 20200812T144111Z
Authorization: AUTHPARAMS
Content-Length: 121

{
  "launchTemplate": {
    "name": "my-template",
    "version": "3"
  },
  "clientRequestToken": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 12 Aug 2020 14:41:12 GMT
Content-Type: application/json
```

```
Content-Length: 248
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
x-amz-apigw-id: DAeuxEBkvHcF1sg=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "update": {
    "id": "8f63ed58-f571-3bf9-87bc-a35f5e3d7687",
    "status": "InProgress",
    "type": "VersionUpdate",
    "params": [
      {
        "type": "LaunchTemplateName",
        "value": "my-launch-template"
      },
      {
        "type": "LaunchTemplateVersion",
        "value": "3"
      }
    ],
    "createdAt": 1597243272.809,
    "errors": []
  }
}
```

See Also

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

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

UpdatePodIdentityAssociation

Service: Amazon Elastic Kubernetes Service

Updates a EKS Pod Identity association. In an update, you can change the IAM role, the target IAM role, or disableSessionTags. You must change at least one of these in an update. An association can't be moved between clusters, namespaces, or service accounts. If you need to edit the namespace or service account, you need to delete the association and then create a new association with your desired settings.

Similar to Amazon IAM behavior, EKS Pod Identity associations are eventually consistent, and may take several seconds to be effective after the initial API call returns successfully. You must design your applications to account for these potential delays. We recommend that you don't include association create/updates in the critical, high-availability code paths of your application. Instead, make changes in a separate initialization or setup routine that you run less frequently.

You can set a *target IAM role* in the same or a different account for advanced scenarios. With a target role, EKS Pod Identity automatically performs two role assumptions in sequence: first assuming the role in the association that is in this account, then using those credentials to assume the target IAM role. This process provides your Pod with temporary credentials that have the permissions defined in the target role, allowing secure access to resources in another Amazon Web Services account.

Request Syntax

```
POST /clusters/name/pod-identity-associations/associationId HTTP/1.1
Content-type: application/json

{
  "clientRequestTokendisableSessionTagsroleArntargetRoleArn
```

URI Request Parameters

The request uses the following URI parameters.

associationId

The ID of the association to be updated.

Required: Yes

name

The name of the cluster that you want to update the association in.

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientRequestToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

disableSessionTags

Disable the automatic sessions tags that are appended by EKS Pod Identity.

EKS Pod Identity adds a pre-defined set of session tags when it assumes the role. You can use these tags to author a single role that can work across resources by allowing access to Amazon resources based on matching tags. By default, EKS Pod Identity attaches six tags, including tags for cluster name, namespace, and service account name. For the list of tags added by EKS Pod Identity, see [List of session tags added by EKS Pod Identity](#) in the *Amazon EKS User Guide*.

Amazon compresses inline session policies, managed policy ARNs, and session tags into a packed binary format that has a separate limit. If you receive a `PackedPolicyTooLarge` error indicating the packed binary format has exceeded the size limit, you can attempt to reduce the size by disabling the session tags added by EKS Pod Identity.

Type: Boolean

Required: No

roleArn

The new IAM role to change in the association.

Type: String

Required: No

targetRoleArn

The Amazon Resource Name (ARN) of the target IAM role to associate with the service account. This role is assumed by using the EKS Pod Identity association role, then the credentials for this role are injected into the Pod.

When you run applications on Amazon EKS, your application might need to access Amazon resources from a different role that exists in the same or different Amazon Web Services account. For example, your application running in “Account A” might need to access resources, such as buckets in “Account B” or within “Account A” itself. You can create a association to access Amazon resources in “Account B” by creating two IAM roles: a role in “Account A” and a role in “Account B” (which can be the same or different account), each with the necessary trust and permission policies. After you provide these roles in the *IAM role* and *Target IAM role* fields, EKS will perform role chaining to ensure your application gets the required permissions. This means Role A will assume Role B, allowing your Pods to securely access resources like S3 buckets in the target account.

Type: String

Required: No

Response Syntax

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

{
  "associationassociationArnassociationIdclusterNamecreatedAtdisableSessionTagsexternalIdmodifiedAtnamespaceownerArnroleArnserviceAccount
```

```
"tags": {  
    "string" : "string"  
},  
"targetRoleArn": "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.

[association](#)

The full description of the association that was updated.

Type: [PodIdentityAssociation](#) object

Errors

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

InvalidArgumentException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

The request is invalid given the state of the cluster. Check the state of the cluster and the associated operations.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found. You can view your available clusters with [ListClusters](#). You can view your available managed node groups with [ListNodegroups](#). Amazon EKS clusters and node groups are Amazon Web Services Region specific.

HTTP Status Code: 404

ServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

See Also

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

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

The following actions are supported by Amazon EKS Auth:

- [AssumeRoleForPodIdentity](#)

AssumeRoleForPodIdentity

Service: Amazon EKS Auth

The Amazon EKS Auth API and the AssumeRoleForPodIdentity action are only used by the EKS Pod Identity Agent.

We recommend that applications use the Amazon SDKs to connect to Amazon services; if credentials from an EKS Pod Identity association are available in the pod, the latest versions of the SDKs use them automatically.

Request Syntax

```
POST /clusters/clusterName/assume-role-for-pod-identity HTTP/1.1
Content-type: application/json

{
  "tokenstring"
}
```

URI Request Parameters

The request uses the following URI parameters.

clusterName

The name of the cluster for the request.

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: [0-9A-Za-z][A-Za-z0-9\-_]*

Required: Yes

Request Body

The request accepts the following data in JSON format.

token

The token of the Kubernetes service account for the pod.

Type: String

Length Constraints: Minimum length of 1.

Pattern: [A-Za-z0-9-_=]+\. [A-Za-z0-9-_=]+\. [A-Za-z0-9-_=]+

Required: Yes

Response Syntax

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

{
  "assumedRoleUserarnassumeRoleIdaudiencecredentialsaccessKeyIdexpirationsecretAccessKeysessionTokenpodIdentityAssociationassociationArnassociationIdsubjectnamespaceserviceAccount
```

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.

assumedRoleUser

An object with the permanent IAM role identity and the temporary session name.

The ARN of the IAM role that the temporary credentials authenticate to.

The session name of the temporary session requested to Amazon STS. The value is a unique identifier that contains the role ID, a colon (:), and the role session name of the role that is being assumed. The role ID is generated by IAM when the role is created. The role session name part of the value follows this format: `eks-clusternamespace-podname-random UUID`

Type: [AssumedRoleUser](#) object

audience

The identity that is allowed to use the credentials. This value is always `pods.eks.amazonaws.com`.

Type: String

credentials

The *Amazon Signature Version 4* type of temporary credentials.

Type: [Credentials](#) object

podIdentityAssociation

The Amazon Resource Name (ARN) and ID of the EKS Pod Identity association.

Type: [PodIdentityAssociation](#) object

subject

The name of the Kubernetes service account inside the cluster to associate the IAM credentials with.

Type: [Subject](#) object

Errors

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

AccessDeniedException

You don't have permissions to perform the requested operation. The IAM principal making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see [Access management](#) in the *IAM User Guide*.

HTTP Status Code: 400

ExpiredTokenException

The specified Kubernetes service account token is expired.

HTTP Status Code: 400

InternalServerException

These errors are usually caused by a server-side issue.

HTTP Status Code: 500

InvalidParameterException

The specified parameter is invalid. Review the available parameters for the API request.

HTTP Status Code: 400

InvalidRequestException

This exception is thrown if the request contains a semantic error. The precise meaning will depend on the API, and will be documented in the error message.

HTTP Status Code: 400

InvalidTokenException

The specified Kubernetes service account token is invalid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource could not be found.

HTTP Status Code: 404

ServiceUnavailableException

The service is unavailable. Back off and retry the operation.

HTTP Status Code: 503

ThrottlingException

The request was denied because your request rate is too high. Reduce the frequency of requests.

HTTP Status Code: 429

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an Amazon Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *Amazon EKS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [Amazon Command Line Interface \(Amazon CLI\)](#) or one of the [Amazon SDKs](#) to make requests to Amazon, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

Example

The following example assumes an IAM role with the EKS Pod Identity association called my-association in a cluster called my-cluster.

Sample Request

```
POST /clusters/my-cluster/assume-role-for-pod-identity HTTP/1.1
Host: eks-auth.us-west-2.api.aws
Accept-Encoding: identity
User-Agent: aws-cli/1.29.81 md/Botocore#1.31.81 ua/2.0 os/macos#22.6.0 md/arch#x86_64
lang/python#3.8.0 md/pyimpl#CPython cfg/retry-mode#legacy botocore/1.31.81
X-Amz-Date: 20231121T192727Z
Authorization: AUTHPARAMS
Content-length: 1043

{
    "token": "eyJhbEXAMPLE"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Fri, 22 Mar 2019 16:01:58 GMT
Content-Type: application/json
Content-Length: 682
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
```

```
x-amz-apigw-id: W84GUEIbPHcFW2Q=
X-Amzn-Trace-Id: Root=1-xxxxxxxx-xxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
    "assumedRoleUser": {
        "arn": "arn:aws:sts::012345678910:assumed-role/my-role/eks-my-cluster-podname-randomUUID",
        "assumeRoleId": "AROA123456789EXAMPLE:eks-my-cluster-podname-randomUUID"
    },
    "audience": "pods.eks.amazonaws.com",
    "credentials": {
        "accessKeyId": "ASIAIOSFODNN7EXAMPLE",
        "expiration": 1.70061547E9,
        "secretAccessKey": "wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY",
        "sessionToken": "EXAMPLE"
    },
    "podIdentityAssociation": {
        "associationArn": "arn:aws:eks:us-west-2:012345678910:podidentityassociation/my-association/a-abcdefghijklmnop1",
        "associationId": "a-abcdefghijklmnop1"
    },
    "subject": {
        "namespace": "my-namespace",
        "serviceAccount": "my-serviceaccount"
    }
}
```

See Also

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

- [Amazon Command Line Interface](#)
- [Amazon SDK for .NET](#)
- [Amazon SDK for C++](#)
- [Amazon SDK for Go v2](#)
- [Amazon SDK for Java 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 Elastic Kubernetes Service:

- [AccessConfigResponse](#)
- [AccessEntry](#)
- [AccessPolicy](#)
- [AccessScope](#)
- [Addon](#)
- [AddonCompatibilityDetail](#)
- [AddonHealth](#)
- [AddonInfo](#)
- [AddonIssue](#)
- [AddonPodIdentityAssociations](#)
- [AddonPodIdentityConfiguration](#)
- [AddonVersionInfo](#)
- [AssociatedAccessPolicy](#)
- [AutoScalingGroup](#)
- [BlockStorage](#)
- [Certificate](#)
- [ClientStat](#)
- [Cluster](#)
- [ClusterHealth](#)
- [ClusterIssue](#)
- [ClusterVersionInformation](#)
- [Compatibility](#)
- [ComputeConfigRequest](#)
- [ComputeConfigResponse](#)
- [ConnectorConfigRequest](#)
- [ConnectorConfigResponse](#)
- [ControlPlanePlacementRequest](#)

- [ControlPlanePlacementResponse](#)
- [CreateAccessConfigRequest](#)
- [DeprecationDetail](#)
- [EksAnywhereSubscription](#)
- [EksAnywhereSubscriptionTerm](#)
- [ElasticLoadBalancing](#)
- [EncryptionConfig](#)
- [ErrorDetail](#)
- [FargateProfile](#)
- [FargateProfileHealth](#)
- [FargateProfileIssue](#)
- [FargateProfileSelector](#)
- [Identity](#)
- [IdentityProviderConfig](#)
- [IdentityProviderConfigResponse](#)
- [Insight](#)
- [InsightCategorySpecificSummary](#)
- [InsightResourceDetail](#)
- [InsightsFilter](#)
- [InsightStatus](#)
- [InsightSummary](#)
- [Issue](#)
- [KubernetesNetworkConfigRequest](#)
- [KubernetesNetworkConfigResponse](#)
- [LaunchTemplateSpecification](#)
- [License](#)
- [Logging](#)
- [LogSetup](#)
- [MarketplaceInformation](#)
- [Nodegroup](#)

- [NodegroupHealth](#)
- [NodegroupResources](#)
- [NodegroupScalingConfig](#)
- [NodegroupUpdateConfig](#)
- [NodeRepairConfig](#)
- [OIDC](#)
- [OidcIdentityProviderConfig](#)
- [OidcIdentityProviderConfigRequest](#)
- [OutpostConfigRequest](#)
- [OutpostConfigResponse](#)
- [PodIdentityAssociation](#)
- [PodIdentityAssociationSummary](#)
- [Provider](#)
- [RemoteAccessConfig](#)
- [RemoteNetworkConfigRequest](#)
- [RemoteNetworkConfigResponse](#)
- [RemoteNodeNetwork](#)
- [RemotePodNetwork](#)
- [StorageConfigRequest](#)
- [StorageConfigResponse](#)
- [Taint](#)
- [Update](#)
- [UpdateAccessConfigRequest](#)
- [UpdateLabelsPayload](#)
- [UpdateParam](#)
- [UpdateTaintsPayload](#)
- [UpgradePolicyRequest](#)
- [UpgradePolicyResponse](#)
- [VpcConfigRequest](#)
- [VpcConfigResponse](#)

- [ZonalShiftConfigRequest](#)
- [ZonalShiftConfigResponse](#)

The following data types are supported by Amazon EKS Auth:

- [AssumedRoleUser](#)
- [Credentials](#)
- [PodIdentityAssociation](#)
- [Subject](#)

Amazon Elastic Kubernetes Service

The following data types are supported by Amazon Elastic Kubernetes Service:

- [AccessConfigResponse](#)
- [AccessEntry](#)
- [AccessPolicy](#)
- [AccessScope](#)
- [Addon](#)
- [AddonCompatibilityDetail](#)
- [AddonHealth](#)
- [AddonInfo](#)
- [AddonIssue](#)
- [AddonPodIdentityAssociations](#)
- [AddonPodIdentityConfiguration](#)
- [AddonVersionInfo](#)
- [AssociatedAccessPolicy](#)
- [AutoScalingGroup](#)
- [BlockStorage](#)
- [Certificate](#)
- [ClientStat](#)
- [Cluster](#)

- [ClusterHealth](#)
- [ClusterIssue](#)
- [ClusterVersionInformation](#)
- [Compatibility](#)
- [ComputeConfigRequest](#)
- [ComputeConfigResponse](#)
- [ConnectorConfigRequest](#)
- [ConnectorConfigResponse](#)
- [ControlPlanePlacementRequest](#)
- [ControlPlanePlacementResponse](#)
- [CreateAccessConfigRequest](#)
- [DeprecationDetail](#)
- [EksAnywhereSubscription](#)
- [EksAnywhereSubscriptionTerm](#)
- [ElasticLoadBalancing](#)
- [EncryptionConfig](#)
- [ErrorDetail](#)
- [FargateProfile](#)
- [FargateProfileHealth](#)
- [FargateProfileIssue](#)
- [FargateProfileSelector](#)
- [Identity](#)
- [IdentityProviderConfig](#)
- [IdentityProviderConfigResponse](#)
- [Insight](#)
- [InsightCategorySpecificSummary](#)
- [InsightResourceDetail](#)
- [InsightsFilter](#)
- [InsightStatus](#)
- [InsightSummary](#)

- [Issue](#)
- [KubernetesNetworkConfigRequest](#)
- [KubernetesNetworkConfigResponse](#)
- [LaunchTemplateSpecification](#)
- [License](#)
- [Logging](#)
- [LogSetup](#)
- [MarketplaceInformation](#)
- [Nodegroup](#)
- [NodegroupHealth](#)
- [NodegroupResources](#)
- [NodegroupScalingConfig](#)
- [NodegroupUpdateConfig](#)
- [NodeRepairConfig](#)
- [OIDC](#)
- [OidcIdentityProviderConfig](#)
- [OidcIdentityProviderConfigRequest](#)
- [OutpostConfigRequest](#)
- [OutpostConfigResponse](#)
- [PodIdentityAssociation](#)
- [PodIdentityAssociationSummary](#)
- [Provider](#)
- [RemoteAccessConfig](#)
- [RemoteNetworkConfigRequest](#)
- [RemoteNetworkConfigResponse](#)
- [RemoteNodeNetwork](#)
- [RemotePodNetwork](#)
- [StorageConfigRequest](#)
- [StorageConfigResponse](#)
- [Taint](#)

- [Update](#)
- [UpdateAccessConfigRequest](#)
- [UpdateLabelsPayload](#)
- [UpdateParam](#)
- [UpdateTaintsPayload](#)
- [UpgradePolicyRequest](#)
- [UpgradePolicyResponse](#)
- [VpcConfigRequest](#)
- [VpcConfigResponse](#)
- [ZonalShiftConfigRequest](#)
- [ZonalShiftConfigResponse](#)

AccessConfigResponse

Service: Amazon Elastic Kubernetes Service

The access configuration for the cluster.

Contents

authenticationMode

The current authentication mode of the cluster.

Type: String

Valid Values: API | API_AND_CONFIG_MAP | CONFIG_MAP

Required: No

bootstrapClusterCreatorAdminPermissions

Specifies whether or not the cluster creator IAM principal was set as a cluster admin access entry during cluster creation time.

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](#)

AccessEntry

Service: Amazon Elastic Kubernetes Service

An access entry allows an IAM principal (user or role) to access your cluster. Access entries can replace the need to maintain the aws-auth ConfigMap for authentication. For more information about access entries, see [Access entries](#) in the *Amazon EKS User Guide*.

Contents

accessEntryArn

The ARN of the access entry.

Type: String

Required: No

clusterName

The name of your cluster.

Type: String

Required: No

createdAt

The Unix epoch timestamp at object creation.

Type: Timestamp

Required: No

kubernetesGroups

A name that you've specified in a Kubernetes RoleBinding or ClusterRoleBinding object so that Kubernetes authorizes the principalARN access to cluster objects.

Type: Array of strings

Required: No

modifiedAt

The Unix epoch timestamp for the last modification to the object.

Type: Timestamp

Required: No

principalArn

The ARN of the IAM principal for the access entry. If you ever delete the IAM principal with this ARN, the access entry isn't automatically deleted. We recommend that you delete the access entry with an ARN for an IAM principal that you delete. If you don't delete the access entry and ever recreate the IAM principal, even if it has the same ARN, the access entry won't work. This is because even though the ARN is the same for the recreated IAM principal, the `roleID` or `userID` (you can see this with the Amazon Security Token Service `GetCallerIdentity` API) is different for the recreated IAM principal than it was for the original IAM principal. Even though you don't see the IAM principal's `roleID` or `userID` for an access entry, Amazon EKS stores it with the access entry.

Type: String

Required: No

tags

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

type

The type of the access entry.

Type: String

Required: No

username

The name of a user that can authenticate to your cluster.

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](#)

AccessPolicy

Service: Amazon Elastic Kubernetes Service

An access policy includes permissions that allow Amazon EKS to authorize an IAM principal to work with Kubernetes objects on your cluster. The policies are managed by Amazon EKS, but they're not IAM policies. You can't view the permissions in the policies using the API. The permissions for many of the policies are similar to the Kubernetes `cluster-admin`, `admin`, `edit`, and `view cluster` roles. For more information about these cluster roles, see [User-facing roles](#) in the Kubernetes documentation. To view the contents of the policies, see [Access policy permissions](#) in the *Amazon EKS User Guide*.

Contents

arn

The ARN of the access policy.

Type: String

Required: No

name

The name of the access policy.

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](#)

AccessScope

Service: Amazon Elastic Kubernetes Service

The scope of an `AccessPolicy` that's associated to an `AccessEntry`.

Contents

namespaces

A Kubernetes namespace that an access policy is scoped to. A value is required if you specified `namespace` for `Type`.

Type: Array of strings

Required: No

type

The scope type of an access policy.

Type: String

Valid Values: `cluster` | `namespace`

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](#)

Addon

Service: Amazon Elastic Kubernetes Service

An Amazon EKS add-on. For more information, see [Amazon EKS add-ons](#) in the *Amazon EKS User Guide*.

Contents

addonArn

The Amazon Resource Name (ARN) of the add-on.

Type: String

Required: No

addonName

The name of the add-on.

Type: String

Required: No

addonVersion

The version of the add-on.

Type: String

Required: No

clusterName

The name of your cluster.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^[0-9A-Za-z][A-Za-z0-9\-_]*

Required: No

configurationValues

The configuration values that you provided.

Type: String

Required: No

createdAt

The Unix epoch timestamp at object creation.

Type: Timestamp

Required: No

health

An object that represents the health of the add-on.

Type: [AddonHealth](#) object

Required: No

marketplaceInformation

Information about an Amazon EKS add-on from the Amazon Web Services Marketplace.

Type: [MarketplaceInformation](#) object

Required: No

modifiedAt

The Unix epoch timestamp for the last modification to the object.

Type: Timestamp

Required: No

owner

The owner of the add-on.

Type: String

Required: No

podIdentityAssociations

An array of EKS Pod Identity associations owned by the add-on. Each association maps a role to a service account in a namespace in the cluster.

For more information, see [Attach an IAM Role to an Amazon EKS add-on using EKS Pod Identity](#) in the *Amazon EKS User Guide*.

Type: Array of strings

Required: No

publisher

The publisher of the add-on.

Type: String

Required: No

serviceAccountRoleArn

The Amazon Resource Name (ARN) of the IAM role that's bound to the Kubernetes ServiceAccount object that the add-on uses.

Type: String

Required: No

status

The status of the add-on.

Type: String

Valid Values: CREATING | ACTIVE | CREATE_FAILED | UPDATING | DELETING | DELETE_FAILED | DEGRADED | UPDATE_FAILED

Required: No

tags

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: 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](#)

AddonCompatibilityDetail

Service: Amazon Elastic Kubernetes Service

The summary information about the Amazon EKS add-on compatibility for the next Kubernetes version for an insight check in the UPGRADE_READINESS category.

Contents

compatibleVersions

The list of compatible Amazon EKS add-on versions for the next Kubernetes version.

Type: Array of strings

Required: No

name

The name of the Amazon EKS add-on.

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](#)

AddonHealth

Service: Amazon Elastic Kubernetes Service

The health of the add-on.

Contents

issues

An object representing the health issues for an add-on.

Type: Array of [AddonIssue](#) 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](#)

AddonInfo

Service: Amazon Elastic Kubernetes Service

Information about an add-on.

Contents

addonName

The name of the add-on.

Type: String

Required: No

addonVersions

An object representing information about available add-on versions and compatible Kubernetes versions.

Type: Array of [AddonVersionInfo](#) objects

Required: No

marketplaceInformation

Information about the add-on from the Amazon Web Services Marketplace.

Type: [MarketplaceInformation](#) object

Required: No

owner

The owner of the add-on.

Type: String

Required: No

publisher

The publisher of the add-on.

Type: String

Required: No

type

The type of the add-on.

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](#)

AddonIssue

Service: Amazon Elastic Kubernetes Service

An issue related to an add-on.

Contents

code

A code that describes the type of issue.

Type: String

Valid Values: AccessDenied | InternalFailure | ClusterUnreachable
| InsufficientNumberOfReplicas | ConfigurationConflict |
AdmissionRequestDenied | UnsupportedAddonModification |
K8sResourceNotFound | AddonSubscriptionNeeded | AddonPermissionFailure

Required: No

message

A message that provides details about the issue and what might cause it.

Type: String

Required: No

resourceIds

The resource IDs of the issue.

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](#)

AddonPodIdentityAssociations

Service: Amazon Elastic Kubernetes Service

A type of EKS Pod Identity association owned by an Amazon EKS add-on.

Each association maps a role to a service account in a namespace in the cluster.

For more information, see [Attach an IAM Role to an Amazon EKS add-on using EKS Pod Identity](#) in the *Amazon EKS User Guide*.

Contents

roleArn

The ARN of an IAM Role.

Type: String

Required: Yes

serviceAccount

The name of a Kubernetes Service Account.

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](#)

AddonPodIdentityConfiguration

Service: Amazon Elastic Kubernetes Service

Information about how to configure IAM for an add-on.

Contents

recommendedManagedPolicies

A suggested IAM Policy for the add-on.

Type: Array of strings

Required: No

serviceAccount

The Kubernetes Service Account name used by the add-on.

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](#)

AddonVersionInfo

Service: Amazon Elastic Kubernetes Service

Information about an add-on version.

Contents

addonVersion

The version of the add-on.

Type: String

Required: No

architecture

The architectures that the version supports.

Type: Array of strings

Required: No

compatibilities

An object representing the compatibilities of a version.

Type: Array of [Compatibility](#) objects

Required: No

computeTypes

Indicates the compute type of the add-on version.

Type: Array of strings

Required: No

requiresConfiguration

Whether the add-on requires configuration.

Type: Boolean

Required: No

requiresiamPermissions

Indicates if the add-on requires IAM Permissions to operate, such as networking permissions.

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](#)

AssociatedAccessPolicy

Service: Amazon Elastic Kubernetes Service

An access policy association.

Contents

accessScope

The scope of the access policy.

Type: [AccessScope](#) object

Required: No

associatedAt

The date and time the AccessPolicy was associated with an AccessEntry.

Type: Timestamp

Required: No

modifiedAt

The Unix epoch timestamp for the last modification to the object.

Type: Timestamp

Required: No

policyArn

The ARN of the AccessPolicy.

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](#)

AutoScalingGroup

Service: Amazon Elastic Kubernetes Service

An Auto Scaling group that is associated with an Amazon EKS managed node group.

Contents

name

The name of the Auto Scaling group associated with an Amazon EKS managed node group.

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](#)

BlockStorage

Service: Amazon Elastic Kubernetes Service

Indicates the current configuration of the block storage capability on your EKS Auto Mode cluster. For example, if the capability is enabled or disabled. If the block storage capability is enabled, EKS Auto Mode will create and delete EBS volumes in your Amazon account. For more information, see EKS Auto Mode block storage capability in the *Amazon EKS User Guide*.

Contents

enabled

Indicates if the block storage capability is enabled on your EKS Auto Mode cluster. If the block storage capability is enabled, EKS Auto Mode will create and delete EBS volumes in your Amazon 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](#)

Certificate

Service: Amazon Elastic Kubernetes Service

An object representing the `certificate-authority-data` for your cluster.

Contents

data

The Base64-encoded certificate data required to communicate with your cluster. Add this to the `certificate-authority-data` section of the `kubeconfig` file for your cluster.

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](#)

ClientStat

Service: Amazon Elastic Kubernetes Service

Details about clients using the deprecated resources.

Contents

lastRequestTime

The timestamp of the last request seen from the Kubernetes client.

Type: Timestamp

Required: No

numberOfRequestsLast30Days

The number of requests from the Kubernetes client seen over the last 30 days.

Type: Integer

Required: No

userAgent

The user agent of the Kubernetes client using the deprecated resource.

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](#)

Cluster

Service: Amazon Elastic Kubernetes Service

An object representing an Amazon EKS cluster.

Contents

accessConfig

The access configuration for the cluster.

Type: [AccessConfigResponse](#) object

Required: No

arn

The Amazon Resource Name (ARN) of the cluster.

Type: String

Required: No

certificateAuthority

The certificate-authority-data for your cluster.

Type: [Certificate](#) object

Required: No

clientRequestToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request.

Type: String

Required: No

computeConfig

Indicates the current configuration of the compute capability on your EKS Auto Mode cluster. For example, if the capability is enabled or disabled. If the compute capability is enabled, EKS Auto Mode will create and delete EC2 Managed Instances in your Amazon account. For more information, see EKS Auto Mode compute capability in the *Amazon EKS User Guide*.

Type: [ComputeConfigResponse](#) object

Required: No

connectorConfig

The configuration used to connect to a cluster for registration.

Type: [ConnectorConfigResponse](#) object

Required: No

createdAt

The Unix epoch timestamp at object creation.

Type: Timestamp

Required: No

encryptionConfig

The encryption configuration for the cluster.

Type: Array of [EncryptionConfig](#) objects

Array Members: Maximum number of 1 item.

Required: No

endpoint

The endpoint for your Kubernetes API server.

Type: String

Required: No

health

An object representing the health of your Amazon EKS cluster.

Type: [ClusterHealth](#) object

Required: No

id

The ID of your local Amazon EKS cluster on an Amazon Outpost. This property isn't available for an Amazon EKS cluster on the Amazon cloud.

Type: String

Required: No

identity

The identity provider information for the cluster.

Type: [Identity](#) object

Required: No

kubernetesNetworkConfig

The Kubernetes network configuration for the cluster.

Type: [KubernetesNetworkConfigResponse](#) object

Required: No

logging

The logging configuration for your cluster.

Type: [Logging](#) object

Required: No

name

The name of your cluster.

Type: String

Required: No

outpostConfig

An object representing the configuration of your local Amazon EKS cluster on an Amazon Outpost. This object isn't available for clusters on the Amazon cloud.

Type: [OutpostConfigResponse](#) object

Required: No

platformVersion

The platform version of your Amazon EKS cluster. For more information about clusters deployed on the Amazon Web Services Cloud, see [Platform versions](#) in the [Amazon EKS User Guide](#). For more information about local clusters deployed on an Outpost, see [Amazon EKS local cluster platform versions](#) in the [Amazon EKS User Guide](#).

Type: String

Required: No

remoteNetworkConfig

The configuration in the cluster for EKS Hybrid Nodes. You can add, change, or remove this configuration after the cluster is created.

Type: [RemoteNetworkConfigResponse](#) object

Required: No

resourcesVpcConfig

The VPC configuration used by the cluster control plane. Amazon EKS VPC resources have specific requirements to work properly with Kubernetes. For more information, see [Cluster VPC considerations](#) and [Cluster security group considerations](#) in the [Amazon EKS User Guide](#).

Type: [VpcConfigResponse](#) object

Required: No

roleArn

The Amazon Resource Name (ARN) of the IAM role that provides permissions for the Kubernetes control plane to make calls to Amazon API operations on your behalf.

Type: String

Required: No

status

The current status of the cluster.

Type: String

Valid Values: CREATING | ACTIVE | DELETING | FAILED | UPDATING | PENDING

Required: No

storageConfig

Indicates the current configuration of the block storage capability on your EKS Auto Mode cluster. For example, if the capability is enabled or disabled. If the block storage capability is enabled, EKS Auto Mode will create and delete EBS volumes in your Amazon account. For more information, see EKS Auto Mode block storage capability in the *Amazon EKS User Guide*.

Type: [StorageConfigResponse](#) object

Required: No

tags

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

upgradePolicy

This value indicates if extended support is enabled or disabled for the cluster.

[Learn more about EKS Extended Support in the Amazon EKS User Guide.](#)

Type: [UpgradePolicyResponse](#) object

Required: No

version

The Kubernetes server version for the cluster.

Type: String

Required: No

zonalShiftConfig

The configuration for zonal shift for the cluster.

Type: [ZonalShiftConfigResponse](#) 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](#)

ClusterHealth

Service: Amazon Elastic Kubernetes Service

An object representing the health of your Amazon EKS cluster.

Contents

issues

An object representing the health issues of your Amazon EKS cluster.

Type: Array of [ClusterIssue](#) 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](#)

ClusterIssue

Service: Amazon Elastic Kubernetes Service

An issue with your Amazon EKS cluster.

Contents

code

The error code of the issue.

Type: String

Valid Values: AccessDenied | ClusterUnreachable | ConfigurationConflict | InternalFailure | ResourceLimitExceeded | ResourceNotFound | IamRoleNotFound | VpcNotFound | InsufficientFreeAddresses | Ec2ServiceNotSubscribed | Ec2SubnetNotFound | Ec2SecurityGroupNotFound | KmsGrantRevoked | KmsKeyNotFound | KmsKeyMarkedForDeletion | KmsKeyDisabled | StsRegionalEndpointDisabled | UnsupportedVersion | Other

Required: No

message

A description of the issue.

Type: String

Required: No

resourceIds

The resource IDs that the issue relates to.

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](#)

ClusterVersionInformation

Service: Amazon Elastic Kubernetes Service

Contains details about a specific EKS cluster version.

Contents

clusterType

The type of cluster this version is for.

Type: String

Required: No

clusterVersion

The Kubernetes version for the cluster.

Type: String

Required: No

defaultPlatformVersion

Default platform version for this Kubernetes version.

Type: String

Required: No

defaultVersion

Indicates if this is a default version.

Type: Boolean

Required: No

endOfExtendedSupportDate

Date when extended support ends for this version.

Type: Timestamp

Required: No

endOfStandardSupportDate

Date when standard support ends for this version.

Type: Timestamp

Required: No

kubernetesPatchVersion

The patch version of Kubernetes for this cluster version.

Type: String

Required: No

releaseDate

The release date of this cluster version.

Type: Timestamp

Required: No

status

⚠ Important

This field is deprecated. Use `versionStatus` instead, as that field matches for input and output of this action.

Current status of this cluster version.

Type: String

Valid Values: `unsupported` | `standard-support` | `extended-support`

Required: No

versionStatus

Current status of this cluster version.

Type: String

Valid Values: UNSUPPORTED | STANDARD_SUPPORT | EXTENDED_SUPPORT

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](#)

Compatibility

Service: Amazon Elastic Kubernetes Service

Compatibility information.

Contents

clusterVersion

The supported Kubernetes version of the cluster.

Type: String

Required: No

defaultVersion

The supported default version.

Type: Boolean

Required: No

platformVersions

The supported compute platform.

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](#)

ComputeConfigRequest

Service: Amazon Elastic Kubernetes Service

Request to update the configuration of the compute capability of your EKS Auto Mode cluster. For example, enable the capability. For more information, see EKS Auto Mode compute capability in the *Amazon EKS User Guide*.

Contents

enabled

Request to enable or disable the compute capability on your EKS Auto Mode cluster. If the compute capability is enabled, EKS Auto Mode will create and delete EC2 Managed Instances in your Amazon account.

Type: Boolean

Required: No

nodePools

Configuration for node pools that defines the compute resources for your EKS Auto Mode cluster. For more information, see EKS Auto Mode Node Pools in the *Amazon EKS User Guide*.

Type: Array of strings

Required: No

nodeRoleArn

The ARN of the IAM Role EKS will assign to EC2 Managed Instances in your EKS Auto Mode cluster. This value cannot be changed after the compute capability of EKS Auto Mode is enabled. For more information, see the IAM Reference in the *Amazon EKS User Guide*.

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](#)

ComputeConfigResponse

Service: Amazon Elastic Kubernetes Service

Indicates the status of the request to update the compute capability of your EKS Auto Mode cluster.

Contents

enabled

Indicates if the compute capability is enabled on your EKS Auto Mode cluster. If the compute capability is enabled, EKS Auto Mode will create and delete EC2 Managed Instances in your Amazon account.

Type: Boolean

Required: No

nodePools

Indicates the current configuration of node pools in your EKS Auto Mode cluster. For more information, see EKS Auto Mode Node Pools in the *Amazon EKS User Guide*.

Type: Array of strings

Required: No

nodeRoleArn

The ARN of the IAM Role EKS will assign to EC2 Managed Instances in your EKS Auto Mode cluster.

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](#)

ConnectorConfigRequest

Service: Amazon Elastic Kubernetes Service

The configuration sent to a cluster for configuration.

Contents

provider

The cloud provider for the target cluster to connect.

Type: String

Valid Values: EKS_ANYWHERE | ANTHOS | GKE | AKS | OPENSHIFT | TANZU | RANCHER | EC2 | OTHER

Required: Yes

roleArn

The Amazon Resource Name (ARN) of the role that is authorized to request the connector configuration.

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](#)

ConnectorConfigResponse

Service: Amazon Elastic Kubernetes Service

The full description of your connected cluster.

Contents

activationCode

A unique code associated with the cluster for registration purposes.

Type: String

Required: No

activationExpiry

The expiration time of the connected cluster. The cluster's YAML file must be applied through the native provider.

Type: Timestamp

Required: No

activationId

A unique ID associated with the cluster for registration purposes.

Type: String

Required: No

provider

The cluster's cloud service provider.

Type: String

Required: No

roleArn

The Amazon Resource Name (ARN) of the role to communicate with services from the connected Kubernetes cluster.

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](#)

ControlPlanePlacementRequest

Service: Amazon Elastic Kubernetes Service

The placement configuration for all the control plane instances of your local Amazon EKS cluster on an Amazon Outpost. For more information, see [Capacity considerations](#) in the *Amazon EKS User Guide*.

Contents

groupName

The name of the placement group for the Kubernetes control plane instances. This setting can't be changed after cluster creation.

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](#)

ControlPlanePlacementResponse

Service: Amazon Elastic Kubernetes Service

The placement configuration for all the control plane instances of your local Amazon EKS cluster on an Amazon Outpost. For more information, see [Capacity considerations](#) in the *Amazon EKS User Guide*.

Contents

groupName

The name of the placement group for the Kubernetes control plane instances.

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](#)

CreateAccessConfigRequest

Service: Amazon Elastic Kubernetes Service

The access configuration information for the cluster.

Contents

authenticationMode

The desired authentication mode for the cluster. If you create a cluster by using the EKS API, Amazon SDKs, or Amazon CloudFormation, the default is CONFIG_MAP. If you create the cluster by using the Amazon Web Services Management Console, the default value is API_AND_CONFIG_MAP.

Type: String

Valid Values: API | API_AND_CONFIG_MAP | CONFIG_MAP

Required: No

bootstrapClusterCreatorAdminPermissions

Specifies whether or not the cluster creator IAM principal was set as a cluster admin access entry during cluster creation time. The default value is true.

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](#)

DeprecationDetail

Service: Amazon Elastic Kubernetes Service

The summary information about deprecated resource usage for an insight check in the UPGRADE_READINESS category.

Contents

clientStats

Details about Kubernetes clients using the deprecated resources.

Type: Array of [ClientStat](#) objects

Required: No

replacedWith

The newer version of the resource to migrate to if applicable.

Type: String

Required: No

startServingReplacementVersion

The version of the software where the newer resource version became available to migrate to if applicable.

Type: String

Required: No

stopServingVersion

The version of the software where the deprecated resource version will stop being served.

Type: String

Required: No

usage

The deprecated version of the resource.

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](#)

EksAnywhereSubscription

Service: Amazon Elastic Kubernetes Service

An EKS Anywhere subscription authorizing the customer to support for licensed clusters and access to EKS Anywhere Curated Packages.

Contents

arn

The Amazon Resource Name (ARN) for the subscription.

Type: String

Required: No

autoRenew

A boolean indicating whether or not a subscription will auto renew when it expires.

Type: Boolean

Required: No

createdAt

The Unix timestamp in seconds for when the subscription was created.

Type: Timestamp

Required: No

effectiveDate

The Unix timestamp in seconds for when the subscription is effective.

Type: Timestamp

Required: No

expirationDate

The Unix timestamp in seconds for when the subscription will expire or auto renew, depending on the auto renew configuration of the subscription object.

Type: Timestamp

Required: No

id

UUID identifying a subscription.

Type: String

Required: No

licenseArns

Amazon License Manager ARN associated with the subscription.

Type: Array of strings

Required: No

licenseQuantity

The number of licenses included in a subscription. Valid values are between 1 and 100.

Type: Integer

Required: No

licenses

Includes all of the claims in the license token necessary to validate the license for extended support.

Type: Array of [License](#) objects

Required: No

licenseType

The type of licenses included in the subscription. Valid value is CLUSTER. With the CLUSTER license type, each license covers support for a single EKS Anywhere cluster.

Type: String

Valid Values: Cluster

Required: No

status

The status of a subscription.

Type: String

Required: No

tags

The metadata for a subscription to assist with categorization and organization. Each tag consists of a key and an optional value. Subscription tags do not propagate to any other resources associated with the subscription.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

term

An EksAnywhereSubscriptionTerm object.

Type: [EksAnywhereSubscriptionTerm](#) 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](#)

EksAnywhereSubscriptionTerm

Service: Amazon Elastic Kubernetes Service

An object representing the term duration and term unit type of your subscription. This determines the term length of your subscription. Valid values are MONTHS for term unit and 12 or 36 for term duration, indicating a 12 month or 36 month subscription.

Contents

duration

The duration of the subscription term. Valid values are 12 and 36, indicating a 12 month or 36 month subscription.

Type: Integer

Required: No

unit

The term unit of the subscription. Valid value is MONTHS.

Type: String

Valid Values: MONTHS

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](#)

ElasticLoadBalancing

Service: Amazon Elastic Kubernetes Service

Indicates the current configuration of the load balancing capability on your EKS Auto Mode cluster. For example, if the capability is enabled or disabled. For more information, see EKS Auto Mode load balancing capability in the *Amazon EKS User Guide*.

Contents

enabled

Indicates if the load balancing capability is enabled on your EKS Auto Mode cluster. If the load balancing capability is enabled, EKS Auto Mode will create and delete load balancers in your Amazon 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](#)

EncryptionConfig

Service: Amazon Elastic Kubernetes Service

The encryption configuration for the cluster.

Contents

provider

Amazon Key Management Service (Amazon KMS) key. Either the ARN or the alias can be used.

Type: [Provider](#) object

Required: No

resources

Specifies the resources to be encrypted. The only supported value is `secrets`.

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](#)

ErrorDetail

Service: Amazon Elastic Kubernetes Service

An object representing an error when an asynchronous operation fails.

Contents

errorCode

A brief description of the error.

- **SubnetNotFound:** We couldn't find one of the subnets associated with the cluster.
- **SecurityGroupNotFound:** We couldn't find one of the security groups associated with the cluster.
- **EniLimitReached:** You have reached the elastic network interface limit for your account.
- **IpNotAvailable:** A subnet associated with the cluster doesn't have any available IP addresses.
- **AccessDenied:** You don't have permissions to perform the specified operation.
- **OperationNotPermitted:** The service role associated with the cluster doesn't have the required access permissions for Amazon EKS.
- **VpcIdNotFound:** We couldn't find the VPC associated with the cluster.

Type: String

Valid Values: SubnetNotFound | SecurityGroupNotFound | EniLimitReached | IpNotAvailable | AccessDenied | OperationNotPermitted | VpcIdNotFound | Unknown | NodeCreationFailure | PodEvictionFailure | InsufficientFreeAddresses | ClusterUnreachable | InsufficientNumberOfReplicas | ConfigurationConflict | AdmissionRequestDenied | UnsupportedAddonModification | K8sResourceNotFound

Required: No

errorMessage

A more complete description of the error.

Type: String

Required: No

resourceIds

An optional field that contains the resource IDs associated with the error.

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](#)

FargateProfile

Service: Amazon Elastic Kubernetes Service

An object representing an Amazon Fargate profile.

Contents

clusterName

The name of your cluster.

Type: String

Required: No

createdAt

The Unix epoch timestamp at object creation.

Type: Timestamp

Required: No

fargateProfileArn

The full Amazon Resource Name (ARN) of the Fargate profile.

Type: String

Required: No

fargateProfileName

The name of the Fargate profile.

Type: String

Required: No

health

The health status of the Fargate profile. If there are issues with your Fargate profile's health, they are listed here.

Type: [FargateProfileHealth](#) object

Required: No

podExecutionRoleArn

The Amazon Resource Name (ARN) of the Pod execution role to use for any Pod that matches the selectors in the Fargate profile. For more information, see [Pod execution role](#) in the *Amazon EKS User Guide*.

Type: String

Required: No

selectors

The selectors to match for a Pod to use this Fargate profile.

Type: Array of [FargateProfileSelector](#) objects

Required: No

status

The current status of the Fargate profile.

Type: String

Valid Values: CREATING | ACTIVE | DELETING | CREATE_FAILED | DELETE_FAILED

Required: No

subnets

The IDs of subnets to launch a Pod into.

Type: Array of strings

Required: No

tags

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: 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](#)

FargateProfileHealth

Service: Amazon Elastic Kubernetes Service

The health status of the Fargate profile. If there are issues with your Fargate profile's health, they are listed here.

Contents

issues

Any issues that are associated with the Fargate profile.

Type: Array of [FargateProfileIssue](#) 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](#)

FargateProfileIssue

Service: Amazon Elastic Kubernetes Service

An issue that is associated with the Fargate profile.

Contents

code

A brief description of the error.

Type: String

Valid Values: PodExecutionRoleAlreadyInUse | AccessDenied | ClusterUnreachable | InternalFailure

Required: No

message

The error message associated with the issue.

Type: String

Required: No

resourceIds

The Amazon resources that are affected by this issue.

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](#)

FargateProfileSelector

Service: Amazon Elastic Kubernetes Service

An object representing an Amazon Fargate profile selector.

Contents

labels

The Kubernetes labels that the selector should match. A pod must contain all of the labels that are specified in the selector for it to be considered a match.

Type: String to string map

Required: No

namespace

The Kubernetes namespace that the selector should match.

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](#)

Identity

Service: Amazon Elastic Kubernetes Service

An object representing an identity provider.

Contents

oidc

An object representing the [OpenID Connect](#) identity provider information.

Type: [OIDC](#) 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](#)

IdentityProviderConfig

Service: Amazon Elastic Kubernetes Service

An object representing an identity provider configuration.

Contents

name

The name of the identity provider configuration.

Type: String

Required: Yes

type

The type of the identity provider configuration. The only type available is oidc.

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](#)

IdentityProviderConfigResponse

Service: Amazon Elastic Kubernetes Service

The full description of your identity configuration.

Contents

oidc

An object representing an OpenID Connect (OIDC) identity provider configuration.

Type: [OidcIdentityProviderConfig](#) 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](#)

Insight

Service: Amazon Elastic Kubernetes Service

A check that provides recommendations to remedy potential upgrade-impacting issues.

Contents

additionalInfo

Links to sources that provide additional context on the insight.

Type: String to string map

Required: No

category

The category of the insight.

Type: String

Valid Values: UPGRADE_READINESS | MISCONFIGURATION

Required: No

categorySpecificSummary

Summary information that relates to the category of the insight. Currently only returned with certain insights having category UPGRADE_READINESS.

Type: [InsightCategorySpecificSummary](#) object

Required: No

description

The description of the insight which includes alert criteria, remediation recommendation, and additional resources (contains Markdown).

Type: String

Required: No

id

The ID of the insight.

Type: String

Required: No

insightStatus

An object containing more detail on the status of the insight resource.

Type: [InsightStatus](#) object

Required: No

kubernetesVersion

The Kubernetes minor version associated with an insight if applicable.

Type: String

Required: No

lastRefreshTime

The time Amazon EKS last successfully completed a refresh of this insight check on the cluster.

Type: Timestamp

Required: No

lastTransitionTime

The time the status of the insight last changed.

Type: Timestamp

Required: No

name

The name of the insight.

Type: String

Required: No

recommendation

A summary of how to remediate the finding of this insight if applicable.

Type: String

Required: No

resources

The details about each resource listed in the insight check result.

Type: Array of [InsightResourceDetail](#) 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](#)

InsightCategorySpecificSummary

Service: Amazon Elastic Kubernetes Service

Summary information that relates to the category of the insight. Currently only returned with certain insights having category UPGRADE_READINESS.

Contents

addonCompatibilityDetails

A list of AddonCompatibilityDetail objects for Amazon EKS add-ons.

Type: Array of [AddonCompatibilityDetail](#) objects

Required: No

deprecationDetails

The summary information about deprecated resource usage for an insight check in the UPGRADE_READINESS category.

Type: Array of [DeprecationDetail](#) 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](#)

InsightResourceDetail

Service: Amazon Elastic Kubernetes Service

Returns information about the resource being evaluated.

Contents

arn

The Amazon Resource Name (ARN) if applicable.

Type: String

Required: No

insightStatus

An object containing more detail on the status of the insight resource.

Type: [InsightStatus](#) object

Required: No

kubernetesResourceUri

The Kubernetes resource URI if applicable.

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](#)

InsightsFilter

Service: Amazon Elastic Kubernetes Service

The criteria to use for the insights.

Contents

categories

The categories to use to filter insights. The following lists the available categories:

- UPGRADE_READINESS: Amazon EKS identifies issues that could impact your ability to upgrade to new versions of Kubernetes. These are called upgrade insights.
- MISCONFIGURATION: Amazon EKS identifies misconfiguration in your EKS Hybrid Nodes setup that could impair functionality of your cluster or workloads. These are called configuration insights.

Type: Array of strings

Valid Values: UPGRADE_READINESS | MISCONFIGURATION

Required: No

kubernetesVersions

The Kubernetes versions to use to filter the insights.

Type: Array of strings

Required: No

statuses

The statuses to use to filter the insights.

Type: Array of strings

Valid Values: PASSING | WARNING | ERROR | UNKNOWN

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](#)

InsightStatus

Service: Amazon Elastic Kubernetes Service

The status of the insight.

Contents

reason

Explanation on the reasoning for the status of the resource.

Type: String

Required: No

status

The status of the resource.

Type: String

Valid Values: PASSING | WARNING | ERROR | UNKNOWN

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](#)

InsightSummary

Service: Amazon Elastic Kubernetes Service

The summarized description of the insight.

Contents

category

The category of the insight.

Type: String

Valid Values: UPGRADE_READINESS | MISCONFIGURATION

Required: No

description

The description of the insight which includes alert criteria, remediation recommendation, and additional resources (contains Markdown).

Type: String

Required: No

id

The ID of the insight.

Type: String

Required: No

insightStatus

An object containing more detail on the status of the insight.

Type: [InsightStatus](#) object

Required: No

kubernetesVersion

The Kubernetes minor version associated with an insight if applicable.

Type: String

Required: No

lastRefreshTime

The time Amazon EKS last successfully completed a refresh of this insight check on the cluster.

Type: Timestamp

Required: No

lastTransitionTime

The time the status of the insight last changed.

Type: Timestamp

Required: No

name

The name of the insight.

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](#)

Issue

Service: Amazon Elastic Kubernetes Service

An object representing an issue with an Amazon EKS resource.

Contents

code

A brief description of the error.

- **AccessDenied:** Amazon EKS or one or more of your managed nodes is failing to authenticate or authorize with your Kubernetes cluster API server.
- **AsgInstanceLaunchFailures:** Your Auto Scaling group is experiencing failures while attempting to launch instances.
- **AutoScalingGroupNotFound:** We couldn't find the Auto Scaling group associated with the managed node group. You may be able to recreate an Auto Scaling group with the same settings to recover.
- **ClusterUnreachable:** Amazon EKS or one or more of your managed nodes is unable to communicate with your Kubernetes cluster API server. This can happen if there are network disruptions or if API servers are timing out processing requests.
- **Ec2InstanceTypeDoesNotExist:** One or more of the supplied Amazon EC2 instance types do not exist. Amazon EKS checked for the instance types that you provided in this Amazon Web Services Region, and one or more aren't available.
- **Ec2LaunchTemplateNotFound:** We couldn't find the Amazon EC2 launch template for your managed node group. You may be able to recreate a launch template with the same settings to recover.
- **Ec2LaunchTemplateVersionMismatch:** The Amazon EC2 launch template version for your managed node group does not match the version that Amazon EKS created. You may be able to revert to the version that Amazon EKS created to recover.
- **Ec2SecurityGroupDeletionFailure:** We could not delete the remote access security group for your managed node group. Remove any dependencies from the security group.
- **Ec2SecurityGroupNotFound:** We couldn't find the cluster security group for the cluster. You must recreate your cluster.
- **Ec2SubnetInvalidConfiguration:** One or more Amazon EC2 subnets specified for a node group do not automatically assign public IP addresses to instances launched into it. If you

want your instances to be assigned a public IP address, then you need to enable the auto-assign public IP address setting for the subnet. See [Modifying the public IPv4 addressing attribute for your subnet](#) in the *Amazon VPC User Guide*.

- **IamInstanceProfileNotFound:** We couldn't find the IAM instance profile for your managed node group. You may be able to recreate an instance profile with the same settings to recover.
- **IamNodeRoleNotFound:** We couldn't find the IAM role for your managed node group. You may be able to recreate an IAM role with the same settings to recover.
- **InstanceLimitExceeded:** Your Amazon account is unable to launch any more instances of the specified instance type. You may be able to request an Amazon EC2 instance limit increase to recover.
- **InsufficientFreeAddresses:** One or more of the subnets associated with your managed node group does not have enough available IP addresses for new nodes.
- **InternalFailure:** These errors are usually caused by an Amazon EKS server-side issue.
- **NodeCreationFailure:** Your launched instances are unable to register with your Amazon EKS cluster. Common causes of this failure are insufficient [node IAM role](#) permissions or lack of outbound internet access for the nodes.

Type: String

Valid Values: AutoScalingGroupNotFound |
AutoScalingGroupInvalidConfiguration | Ec2SecurityGroupNotFound
| Ec2SecurityGroupDeletionFailure | Ec2LaunchTemplateNotFound
| Ec2LaunchTemplateVersionMismatch | Ec2SubnetNotFound |
Ec2SubnetInvalidConfiguration | IamInstanceProfileNotFound
| Ec2SubnetMissingIpv6Assignment | IamLimitExceeded |
IamNodeRoleNotFound | NodeCreationFailure | AsgInstanceLaunchFailures
| InstanceLimitExceeded | InsufficientFreeAddresses | AccessDenied
| InternalFailure | ClusterUnreachable | AmiIdNotFound |
AutoScalingGroupOptInRequired | AutoScalingGroupRateLimitExceeded |
Ec2LaunchTemplateDeletionFailure | Ec2LaunchTemplateInvalidConfiguration
| Ec2LaunchTemplateMaxLimitExceeded | Ec2SubnetListTooLong |
IamThrottling | NodeTerminationFailure | PodEvictionFailure
| SourceEc2LaunchTemplateNotFound | LimitExceeded | Unknown |
AutoScalingGroupInstanceRefreshActive | KubernetesLabelInvalid |
Ec2LaunchTemplateVersionMaxLimitExceeded | Ec2InstanceTypeDoesNotExist

Required: No

message

The error message associated with the issue.

Type: String

Required: No

resourceIds

The Amazon resources that are afflicted by this issue.

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](#)

KubernetesNetworkConfigRequest

Service: Amazon Elastic Kubernetes Service

The Kubernetes network configuration for the cluster.

Contents

elasticLoadBalancing

Request to enable or disable the load balancing capability on your EKS Auto Mode cluster. For more information, see EKS Auto Mode load balancing capability in the *Amazon EKS User Guide*.

Type: [ElasticLoadBalancing](#) object

Required: No

ipFamily

Specify which IP family is used to assign Kubernetes pod and service IP addresses. If you don't specify a value, `ipv4` is used by default. You can only specify an IP family when you create a cluster and can't change this value once the cluster is created. If you specify `ipv6`, the VPC and subnets that you specify for cluster creation must have both IPv4 and IPv6 CIDR blocks assigned to them. You can't specify `ipv6` for clusters in China Regions.

You can only specify `ipv6` for 1.21 and later clusters that use version 1.10.1 or later of the Amazon VPC CNI add-on. If you specify `ipv6`, then ensure that your VPC meets the requirements listed in the considerations listed in [Assigning IPv6 addresses to pods and services](#) in the *Amazon EKS User Guide*. Kubernetes assigns services IPv6 addresses from the unique local address range (`fc00::/7`). You can't specify a custom IPv6 CIDR block. Pod addresses are assigned from the subnet's IPv6 CIDR.

Type: String

Valid Values: `ipv4` | `ipv6`

Required: No

servicelpv4Cidr

Don't specify a value if you select `ipv6` for `ipFamily`. The CIDR block to assign Kubernetes service IP addresses from. If you don't specify a block, Kubernetes assigns addresses from either the `10.100.0.0/16` or `172.20.0.0/16` CIDR blocks. We recommend that you specify a block

that does not overlap with resources in other networks that are peered or connected to your VPC. The block must meet the following requirements:

- Within one of the following private IP address blocks: 10.0.0.0/8, 172.16.0.0/12, or 192.168.0.0/16.
- Doesn't overlap with any CIDR block assigned to the VPC that you selected for VPC.
- Between /24 and /12.

⚠️ Important

You can only specify a custom CIDR block when you create a cluster. You can't change this value after the cluster is created.

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](#)

KubernetesNetworkConfigResponse

Service: Amazon Elastic Kubernetes Service

The Kubernetes network configuration for the cluster. The response contains a value for **servicelpv6Cidr** or **servicelpv4Cidr**, but not both.

Contents

elasticLoadBalancing

Indicates the current configuration of the load balancing capability on your EKS Auto Mode cluster. For example, if the capability is enabled or disabled.

Type: [ElasticLoadBalancing](#) object

Required: No

ipFamily

The IP family used to assign Kubernetes Pod and Service objects IP addresses. The IP family is always `ipv4`, unless you have a 1.21 or later cluster running version 1.10.1 or later of the Amazon VPC CNI plugin for Kubernetes and specified `ipv6` when you created the cluster.

Type: String

Valid Values: `ipv4` | `ipv6`

Required: No

servicelpv4Cidr

The CIDR block that Kubernetes Pod and Service object IP addresses are assigned from. Kubernetes assigns addresses from an IPv4 CIDR block assigned to a subnet that the node is in. If you didn't specify a CIDR block when you created the cluster, then Kubernetes assigns addresses from either the `10.100.0.0/16` or `172.20.0.0/16` CIDR blocks. If this was specified, then it was specified when the cluster was created and it can't be changed.

Type: String

Required: No

servicelpv6Cidr

The CIDR block that Kubernetes pod and service IP addresses are assigned from if you created a 1.21 or later cluster with version 1.10.1 or later of the Amazon VPC CNI add-on and specified

ipv6 for **ipFamily** when you created the cluster. Kubernetes assigns service addresses from the unique local address range (`fc00::/7`) because you can't specify a custom IPv6 CIDR block when you create the cluster.

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](#)

LaunchTemplateSpecification

Service: Amazon Elastic Kubernetes Service

An object representing a node group launch template specification. The launch template can't include [SubnetId](#), [IamInstanceProfile](#), [RequestSpotInstances](#), [HibernationOptions](#), or [TerminateInstances](#), or the node group deployment or update will fail. For more information about launch templates, see [CreateLaunchTemplate](#) in the Amazon EC2 API Reference. For more information about using launch templates with Amazon EKS, see [Customizing managed nodes with launch templates](#) in the *Amazon EKS User Guide*.

You must specify either the launch template ID or the launch template name in the request, but not both.

Contents

id

The ID of the launch template.

You must specify either the launch template ID or the launch template name in the request, but not both. After node group creation, you cannot use a different ID.

Type: String

Required: No

name

The name of the launch template.

You must specify either the launch template name or the launch template ID in the request, but not both. After node group creation, you cannot use a different name.

Type: String

Required: No

version

The version number of the launch template to use. If no version is specified, then the template's default version is used. You can use a different version for node group updates.

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](#)

License

Service: Amazon Elastic Kubernetes Service

An EKS Anywhere license associated with a subscription.

Contents

id

An id associated with an EKS Anywhere subscription license.

Type: String

Required: No

token

An optional license token that can be used for extended support verification.

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](#)

Logging

Service: Amazon Elastic Kubernetes Service

An object representing the logging configuration for resources in your cluster.

Contents

clusterLogging

The cluster control plane logging configuration for your cluster.

Type: Array of [LogSetup](#) 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](#)

LogSetup

Service: Amazon Elastic Kubernetes Service

An object representing the enabled or disabled Kubernetes control plane logs for your cluster.

Contents

enabled

If a log type is enabled, that log type exports its control plane logs to CloudWatch Logs . If a log type isn't enabled, that log type doesn't export its control plane logs. Each individual log type can be enabled or disabled independently.

Type: Boolean

Required: No

types

The available cluster control plane log types.

Type: Array of strings

Valid Values: api | audit | authenticator | controllerManager | scheduler

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](#)

MarketplaceInformation

Service: Amazon Elastic Kubernetes Service

Information about an Amazon EKS add-on from the Amazon Web Services Marketplace.

Contents

productId

The product ID from the Amazon Web Services Marketplace.

Type: String

Required: No

productUrl

The product URL from the Amazon Web Services Marketplace.

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](#)

Nodegroup

Service: Amazon Elastic Kubernetes Service

An object representing an Amazon EKS managed node group.

Contents

amiType

If the node group was deployed using a launch template with a custom AMI, then this is CUSTOM. For node groups that weren't deployed using a launch template, this is the AMI type that was specified in the node group configuration.

Type: String

Valid Values: AL2_x86_64 | AL2_x86_64_GPU | AL2_ARM_64 | CUSTOM | BOTTLEROCKET_ARM_64 | BOTTLEROCKET_x86_64 | BOTTLEROCKET_ARM_64_FIPS | BOTTLEROCKET_x86_64_FIPS | BOTTLEROCKET_ARM_64_NVIDIA | BOTTLEROCKET_x86_64_NVIDIA | WINDOWS_CORE_2019_x86_64 | WINDOWS_FULL_2019_x86_64 | WINDOWS_CORE_2022_x86_64 | WINDOWS_FULL_2022_x86_64 | AL2023_x86_64_STANDARD | AL2023_ARM_64_STANDARD | AL2023_x86_64_NEURON | AL2023_x86_64_NVIDIA | AL2023_ARM_64_NVIDIA

Required: No

capacityType

The capacity type of your managed node group.

Type: String

Valid Values: ON_DEMAND | SPOT | CAPACITY_BLOCK

Required: No

clusterName

The name of your cluster.

Type: String

Required: No

createdAt

The Unix epoch timestamp at object creation.

Type: Timestamp

Required: No

diskSize

If the node group wasn't deployed with a launch template, then this is the disk size in the node group configuration. If the node group was deployed with a launch template, then this is null.

Type: Integer

Required: No

health

The health status of the node group. If there are issues with your node group's health, they are listed here.

Type: [NodegroupHealth](#) object

Required: No

instanceTypes

If the node group wasn't deployed with a launch template, then this is the instance type that is associated with the node group. If the node group was deployed with a launch template, then this is null.

Type: Array of strings

Required: No

labels

The Kubernetes labels applied to the nodes in the node group.

Note

Only labels that are applied with the Amazon EKS API are shown here. There may be other Kubernetes labels applied to the nodes in this group.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 63.

Value Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

launchTemplate

If a launch template was used to create the node group, then this is the launch template that was used.

Type: [LaunchTemplateSpecification](#) object

Required: No

modifiedAt

The Unix epoch timestamp for the last modification to the object.

Type: Timestamp

Required: No

nodegroupArn

The Amazon Resource Name (ARN) associated with the managed node group.

Type: String

Required: No

nodegroupName

The name associated with an Amazon EKS managed node group.

Type: String

Required: No

nodeRepairConfig

The node auto repair configuration for the node group.

Type: [NodeRepairConfig](#) object

Required: No

nodeRole

The IAM role associated with your node group. The Amazon EKS node kubelet daemon makes calls to Amazon APIs on your behalf. Nodes receive permissions for these API calls through an IAM instance profile and associated policies.

Type: String

Required: No

releaseVersion

If the node group was deployed using a launch template with a custom AMI, then this is the AMI ID that was specified in the launch template. For node groups that weren't deployed using a launch template, this is the version of the Amazon EKS optimized AMI that the node group was deployed with.

Type: String

Required: No

remoteAccess

If the node group wasn't deployed with a launch template, then this is the remote access configuration that is associated with the node group. If the node group was deployed with a launch template, then this is null.

Type: [RemoteAccessConfig](#) object

Required: No

resources

The resources associated with the node group, such as Auto Scaling groups and security groups for remote access.

Type: [NodegroupResources](#) object

Required: No

scalingConfig

The scaling configuration details for the Auto Scaling group that is associated with your node group.

Type: [NodegroupScalingConfig](#) object

Required: No

status

The current status of the managed node group.

Type: String

Valid Values: CREATING | ACTIVE | UPDATING | DELETING | CREATE_FAILED | DELETE_FAILED | DEGRADED

Required: No

subnets

The subnets that were specified for the Auto Scaling group that is associated with your node group.

Type: Array of strings

Required: No

tags

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

taints

The Kubernetes taints to be applied to the nodes in the node group when they are created. Effect is one of No_Schedule, Prefer_No_Schedule, or No_Execute. Kubernetes taints can be used together with tolerations to control how workloads are scheduled to your nodes. For more information, see [Node taints on managed node groups](#).

Type: Array of [Taint](#) objects

Required: No

updateConfig

The node group update configuration.

Type: [NodegroupUpdateConfig](#) object

Required: No

version

The Kubernetes version of the managed node group.

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](#)

NodegroupHealth

Service: Amazon Elastic Kubernetes Service

An object representing the health status of the node group.

Contents

issues

Any issues that are associated with the node group.

Type: Array of [Issue](#) 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](#)

NodegroupResources

Service: Amazon Elastic Kubernetes Service

An object representing the resources associated with the node group, such as Auto Scaling groups and security groups for remote access.

Contents

autoScalingGroups

The Auto Scaling groups associated with the node group.

Type: Array of [AutoScalingGroup](#) objects

Required: No

remoteAccessSecurityGroup

The remote access security group associated with the node group. This security group controls SSH access to the nodes.

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](#)

NodegroupScalingConfig

Service: Amazon Elastic Kubernetes Service

An object representing the scaling configuration details for the Auto Scaling group that is associated with your node group. When creating a node group, you must specify all or none of the properties. When updating a node group, you can specify any or none of the properties.

Contents

desiredSize

The current number of nodes that the managed node group should maintain.

Important

If you use the Kubernetes [Cluster Autoscaler](#), you shouldn't change the `desiredSize` value directly, as this can cause the Cluster Autoscaler to suddenly scale up or scale down.

Whenever this parameter changes, the number of worker nodes in the node group is updated to the specified size. If this parameter is given a value that is smaller than the current number of running worker nodes, the necessary number of worker nodes are terminated to match the given value. When using CloudFormation, no action occurs if you remove this parameter from your CFN template.

This parameter can be different from `minSize` in some cases, such as when starting with extra hosts for testing. This parameter can also be different when you want to start with an estimated number of needed hosts, but let the Cluster Autoscaler reduce the number if there are too many. When the Cluster Autoscaler is used, the `desiredSize` parameter is altered by the Cluster Autoscaler (but can be out-of-date for short periods of time). the Cluster Autoscaler doesn't scale a managed node group lower than `minSize` or higher than `maxSize`.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

maxSize

The maximum number of nodes that the managed node group can scale out to. For information about the maximum number that you can specify, see [Amazon EKS service quotas](#) in the *Amazon EKS User Guide*.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

minSize

The minimum number of nodes that the managed node group can scale in to.

Type: Integer

Valid Range: Minimum value of 0.

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](#)

NodegroupUpdateConfig

Service: Amazon Elastic Kubernetes Service

The node group update configuration. An Amazon EKS managed node group updates by replacing nodes with new nodes of newer AMI versions in parallel. You choose the *maximum unavailable* and the *update strategy*.

Contents

maxUnavailable

The maximum number of nodes unavailable at once during a version update. Nodes are updated in parallel. This value or maxUnavailablePercentage is required to have a value. The maximum number is 100.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

maxUnavailablePercentage

The maximum percentage of nodes unavailable during a version update. This percentage of nodes are updated in parallel, up to 100 nodes at once. This value or maxUnavailable is required to have a value.

Type: Integer

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

Required: No

updateStrategy

The configuration for the behavior to follow during a node group version update of this managed node group. You choose between two possible strategies for replacing nodes during an [UpdateNodegroupVersion](#) action.

An Amazon EKS managed node group updates by replacing nodes with new nodes of newer AMI versions in parallel. The *update strategy* changes the managed node update behavior of the managed node group for each quantity. The *default* strategy has guardrails to protect you from

misconfiguration and launches the new instances first, before terminating the old instances. The *minimal* strategy removes the guardrails and terminates the old instances before launching the new instances. This minimal strategy is useful in scenarios where you are constrained to resources or costs (for example, with hardware accelerators such as GPUs).

Type: String

Valid Values: DEFAULT | MINIMAL

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](#)

NodeRepairConfig

Service: Amazon Elastic Kubernetes Service

The node auto repair configuration for the node group.

Contents

enabled

Specifies whether to enable node auto repair for the node group. Node auto repair is disabled by 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](#)

OIDC

Service: Amazon Elastic Kubernetes Service

An object representing the [OpenID Connect](#) (OIDC) identity provider information for the cluster.

Contents

issuer

The issuer URL for the OIDC identity provider.

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](#)

OidcIdentityProviderConfig

Service: Amazon Elastic Kubernetes Service

An object representing the configuration for an OpenID Connect (OIDC) identity provider.

Contents

clientId

This is also known as *audience*. The ID of the client application that makes authentication requests to the OIDC identity provider.

Type: String

Required: No

clusterName

The name of your cluster.

Type: String

Required: No

groupsClaim

The JSON web token (JWT) claim that the provider uses to return your groups.

Type: String

Required: No

groupsPrefix

The prefix that is prepended to group claims to prevent clashes with existing names (such as `system: groups`). For example, the value `oidc:` creates group names like `oidc:engineering` and `oidc:infra`. The prefix can't contain `system:`

Type: String

Required: No

identityProviderConfigArn

The ARN of the configuration.

Type: String

Required: No

identityProviderConfigName

The name of the configuration.

Type: String

Required: No

issuerUrl

The URL of the OIDC identity provider that allows the API server to discover public signing keys for verifying tokens.

Type: String

Required: No

requiredClaims

The key-value pairs that describe required claims in the identity token. If set, each claim is verified to be present in the token with a matching value.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 63.

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

Required: No

status

The status of the OIDC identity provider.

Type: String

Valid Values: CREATING | DELETING | ACTIVE

Required: No

tags

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

usernameClaim

The JSON Web token (JWT) claim that is used as the username.

Type: String

Required: No

usernamePrefix

The prefix that is prepended to username claims to prevent clashes with existing names. The prefix can't contain system:

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](#)

OidcIdentityProviderConfigRequest

Service: Amazon Elastic Kubernetes Service

An object representing an OpenID Connect (OIDC) configuration. Before associating an OIDC identity provider to your cluster, review the considerations in [Authenticating users for your cluster from an OIDC identity provider](#) in the *Amazon EKS User Guide*.

Contents

clientId

This is also known as *audience*. The ID for the client application that makes authentication requests to the OIDC identity provider.

Type: String

Required: Yes

identityProviderConfigName

The name of the OIDC provider configuration.

Type: String

Required: Yes

issuerUrl

The URL of the OIDC identity provider that allows the API server to discover public signing keys for verifying tokens. The URL must begin with https:// and should correspond to the iss claim in the provider's OIDC ID tokens. Based on the OIDC standard, path components are allowed but query parameters are not. Typically the URL consists of only a hostname, like https://server.example.org or https://example.com. This URL should point to the level below .well-known/openid-configuration and must be publicly accessible over the internet.

Type: String

Required: Yes

groupsClaim

The JWT claim that the provider uses to return your groups.

Type: String

Required: No

groupsPrefix

The prefix that is prepended to group claims to prevent clashes with existing names (such as system: groups). For example, the value oidc: will create group names like oidc:engineering and oidc:infra.

Type: String

Required: No

requiredClaims

The key value pairs that describe required claims in the identity token. If set, each claim is verified to be present in the token with a matching value. For the maximum number of claims that you can require, see [Amazon EKS service quotas](#) in the *Amazon EKS User Guide*.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 63.

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

Required: No

usernameClaim

The JSON Web Token (JWT) claim to use as the username. The default is sub, which is expected to be a unique identifier of the end user. You can choose other claims, such as email or name, depending on the OIDC identity provider. Claims other than email are prefixed with the issuer URL to prevent naming clashes with other plug-ins.

Type: String

Required: No

usernamePrefix

The prefix that is prepended to username claims to prevent clashes with existing names. If you do not provide this field, and username is a value other than email, the prefix defaults to issuerurl#. You can use the value - to disable all prefixing.

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](#)

OutpostConfigRequest

Service: Amazon Elastic Kubernetes Service

The configuration of your local Amazon EKS cluster on an Amazon Outpost. Before creating a cluster on an Outpost, review [Creating a local cluster on an Outpost](#) in the *Amazon EKS User Guide*. This API isn't available for Amazon EKS clusters on the Amazon cloud.

Contents

controlPlaneInstanceType

The Amazon EC2 instance type that you want to use for your local Amazon EKS cluster on Outposts. Choose an instance type based on the number of nodes that your cluster will have. For more information, see [Capacity considerations](#) in the *Amazon EKS User Guide*.

The instance type that you specify is used for all Kubernetes control plane instances. The instance type can't be changed after cluster creation. The control plane is not automatically scaled by Amazon EKS.

Type: String

Required: Yes

outpostArns

The ARN of the Outpost that you want to use for your local Amazon EKS cluster on Outposts. Only a single Outpost ARN is supported.

Type: Array of strings

Required: Yes

controlPlanePlacement

An object representing the placement configuration for all the control plane instances of your local Amazon EKS cluster on an Amazon Outpost. For more information, see [Capacity considerations](#) in the *Amazon EKS User Guide*.

Type: [ControlPlanePlacementRequest](#) 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](#)

OutpostConfigResponse

Service: Amazon Elastic Kubernetes Service

An object representing the configuration of your local Amazon EKS cluster on an Amazon Outpost. This API isn't available for Amazon EKS clusters on the Amazon cloud.

Contents

controlPlaneInstanceType

The Amazon EC2 instance type used for the control plane. The instance type is the same for all control plane instances.

Type: String

Required: Yes

outpostArns

The ARN of the Outpost that you specified for use with your local Amazon EKS cluster on Outposts.

Type: Array of strings

Required: Yes

controlPlanePlacement

An object representing the placement configuration for all the control plane instances of your local Amazon EKS cluster on an Amazon Outpost. For more information, see [Capacity considerations](#) in the *Amazon EKS User Guide*.

Type: [ControlPlanePlacementResponse](#) 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](#)

PodIdentityAssociation

Service: Amazon Elastic Kubernetes Service

Amazon EKS Pod Identity associations provide the ability to manage credentials for your applications, similar to the way that Amazon EC2 instance profiles provide credentials to Amazon EC2 instances.

Contents

associationArn

The Amazon Resource Name (ARN) of the association.

Type: String

Required: No

associationId

The ID of the association.

Type: String

Required: No

clusterName

The name of the cluster that the association is in.

Type: String

Required: No

createdAt

The timestamp that the association was created at.

Type: Timestamp

Required: No

disableSessionTags

The state of the automatic sessions tags. The value of *true* disables these tags.

EKS Pod Identity adds a pre-defined set of session tags when it assumes the role. You can use these tags to author a single role that can work across resources by allowing access to Amazon resources based on matching tags. By default, EKS Pod Identity attaches six tags, including tags for cluster name, namespace, and service account name. For the list of tags added by EKS Pod Identity, see [List of session tags added by EKS Pod Identity](#) in the *Amazon EKS User Guide*.

Type: Boolean

Required: No

externalId

The unique identifier for this EKS Pod Identity association for a target IAM role. You put this value in the trust policy of the target role, in a Condition to match the `sts.ExternalId`. This ensures that the target role can only be assumed by this association. This prevents the *confused deputy problem*. For more information about the confused deputy problem, see [The confused deputy problem](#) in the *IAM User Guide*.

If you want to use the same target role with multiple associations or other roles, use independent statements in the trust policy to allow `sts:AssumeRole` access from each role.

Type: String

Required: No

modifiedAt

The most recent timestamp that the association was modified at.

Type: Timestamp

Required: No

namespace

The name of the Kubernetes namespace inside the cluster to create the association in. The service account and the Pods that use the service account must be in this namespace.

Type: String

Required: No

ownerArn

If defined, the EKS Pod Identity association is owned by an Amazon EKS add-on.

Type: String

Required: No

roleArn

The Amazon Resource Name (ARN) of the IAM role to associate with the service account.

The EKS Pod Identity agent manages credentials to assume this role for applications in the containers in the Pods that use this service account.

Type: String

Required: No

serviceAccount

The name of the Kubernetes service account inside the cluster to associate the IAM credentials with.

Type: String

Required: No

tags

Metadata that assists with categorization and organization. Each tag consists of a key and an optional value. You define both. Tags don't propagate to any other cluster or Amazon resources.

The following basic restrictions apply to tags:

- Maximum number of tags per resource – 50
- For each resource, each tag key must be unique, and each tag key can have only one value.
- Maximum key length – 128 Unicode characters in UTF-8
- Maximum value length – 256 Unicode characters in UTF-8
- If your tagging schema is used across multiple services and resources, remember that other services may have restrictions on allowed characters. Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following characters: + - = . _ : / @.
- Tag keys and values are case-sensitive.
- Do not use aws:, AWS:, or any upper or lowercase combination of such as a prefix for either keys or values as it is reserved for Amazon use. You cannot edit or delete tag keys or values with this prefix. Tags with this prefix do not count against your tags per resource limit.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Value Length Constraints: Maximum length of 256.

Required: No

targetRoleArn

The Amazon Resource Name (ARN) of the target IAM role to associate with the service account. This role is assumed by using the EKS Pod Identity association role, then the credentials for this role are injected into the Pod.

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](#)

PodIdentityAssociationSummary

Service: Amazon Elastic Kubernetes Service

The summarized description of the association.

Each summary is simplified by removing these fields compared to the full

[PodIdentityAssociation](#):

- The IAM role: `roleArn`
- The timestamp that the association was created at: `createdAt`
- The most recent timestamp that the association was modified at: `modifiedAt`
- The tags on the association: `tags`

Contents

associationArn

The Amazon Resource Name (ARN) of the association.

Type: String

Required: No

associationId

The ID of the association.

Type: String

Required: No

clusterName

The name of the cluster that the association is in.

Type: String

Required: No

namespace

The name of the Kubernetes namespace inside the cluster to create the association in. The service account and the Pods that use the service account must be in this namespace.

Type: String

Required: No

ownerArn

If defined, the association is owned by an Amazon EKS add-on.

Type: String

Required: No

serviceAccount

The name of the Kubernetes service account inside the cluster to associate the IAM credentials with.

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](#)

Provider

Service: Amazon Elastic Kubernetes Service

Identifies the Amazon Key Management Service (Amazon KMS) key used to encrypt the secrets.

Contents

keyArn

Amazon Resource Name (ARN) or alias of the KMS key. The KMS key must be symmetric and created in the same Amazon Web Services Region as the cluster. If the KMS key was created in a different account, the [IAM principal](#) must have access to the KMS key. For more information, see [Allowing users in other accounts to use a KMS key](#) in the *Amazon Key Management Service Developer Guide*.

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](#)

RemoteAccessConfig

Service: Amazon Elastic Kubernetes Service

An object representing the remote access configuration for the managed node group.

Contents

ec2SshKey

The Amazon EC2 SSH key name that provides access for SSH communication with the nodes in the managed node group. For more information, see [Amazon EC2 key pairs and Linux instances](#) in the *Amazon Elastic Compute Cloud User Guide for Linux Instances*. For Windows, an Amazon EC2 SSH key is used to obtain the RDP password. For more information, see [Amazon EC2 key pairs and Windows instances](#) in the *Amazon Elastic Compute Cloud User Guide for Windows Instances*.

Type: String

Required: No

sourceSecurityGroups

The security group IDs that are allowed SSH access (port 22) to the nodes. For Windows, the port is 3389. If you specify an Amazon EC2 SSH key but don't specify a source security group when you create a managed node group, then the port on the nodes is opened to the internet ($0.0.0.0/0$). For more information, see [Security Groups for Your VPC](#) in the *Amazon Virtual Private Cloud User Guide*.

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](#)

RemoteNetworkConfigRequest

Service: Amazon Elastic Kubernetes Service

The configuration in the cluster for EKS Hybrid Nodes. You can add, change, or remove this configuration after the cluster is created.

Contents

remoteNodeNetworks

The list of network CIDRs that can contain hybrid nodes.

These CIDR blocks define the expected IP address range of the hybrid nodes that join the cluster. These blocks are typically determined by your network administrator.

Enter one or more IPv4 CIDR blocks in decimal dotted-quad notation (for example, 10.2.0.0/16).

It must satisfy the following requirements:

- Each block must be within an IPv4 RFC-1918 network range. Minimum allowed size is /32, maximum allowed size is /8. Publicly-routable addresses aren't supported.
- Each block cannot overlap with the range of the VPC CIDR blocks for your EKS resources, or the block of the Kubernetes service IP range.
- Each block must have a route to the VPC that uses the VPC CIDR blocks, not public IPs or Elastic IPs. There are many options including Amazon Transit Gateway, Amazon Site-to-Site VPN, or Amazon Direct Connect.
- Each host must allow outbound connection to the EKS cluster control plane on TCP ports 443 and 10250.
- Each host must allow inbound connection from the EKS cluster control plane on TCP port 10250 for logs, exec and port-forward operations.
- Each host must allow TCP and UDP network connectivity to and from other hosts that are running CoreDNS on UDP port 53 for service and pod DNS names.

Type: Array of [RemoteNodeNetwork](#) objects

Array Members: Maximum number of 1 item.

Required: No

remotePodNetworks

The list of network CIDRs that can contain pods that run Kubernetes webhooks on hybrid nodes.

These CIDR blocks are determined by configuring your Container Network Interface (CNI) plugin. We recommend the Calico CNI or Cilium CNI. Note that the Amazon VPC CNI plugin for Kubernetes isn't available for on-premises and edge locations.

Enter one or more IPv4 CIDR blocks in decimal dotted-quad notation (for example, `10.2.0.0/16`).

It must satisfy the following requirements:

- Each block must be within an IPv4 RFC-1918 network range. Minimum allowed size is /32, maximum allowed size is /8. Publicly-routable addresses aren't supported.
- Each block cannot overlap with the range of the VPC CIDR blocks for your EKS resources, or the block of the Kubernetes service IP range.

Type: Array of [RemotePodNetwork](#) objects

Array Members: Maximum number of 1 item.

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](#)

RemoteNetworkConfigResponse

Service: Amazon Elastic Kubernetes Service

The configuration in the cluster for EKS Hybrid Nodes. You can add, change, or remove this configuration after the cluster is created.

Contents

remoteNodeNetworks

The list of network CIDRs that can contain hybrid nodes.

Type: Array of [RemoteNodeNetwork](#) objects

Array Members: Maximum number of 1 item.

Required: No

remotePodNetworks

The list of network CIDRs that can contain pods that run Kubernetes webhooks on hybrid nodes.

Type: Array of [RemotePodNetwork](#) objects

Array Members: Maximum number of 1 item.

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](#)

RemoteNodeNetwork

Service: Amazon Elastic Kubernetes Service

A network CIDR that can contain hybrid nodes.

These CIDR blocks define the expected IP address range of the hybrid nodes that join the cluster. These blocks are typically determined by your network administrator.

Enter one or more IPv4 CIDR blocks in decimal dotted-quad notation (for example, 10.2.0.0/16).

It must satisfy the following requirements:

- Each block must be within an IPv4 RFC-1918 network range. Minimum allowed size is /32, maximum allowed size is /8. Publicly-routable addresses aren't supported.
- Each block cannot overlap with the range of the VPC CIDR blocks for your EKS resources, or the block of the Kubernetes service IP range.
- Each block must have a route to the VPC that uses the VPC CIDR blocks, not public IPs or Elastic IPs. There are many options including Amazon Transit Gateway, Amazon Site-to-Site VPN, or Amazon Direct Connect.
- Each host must allow outbound connection to the EKS cluster control plane on TCP ports 443 and 10250.
- Each host must allow inbound connection from the EKS cluster control plane on TCP port 10250 for logs, exec and port-forward operations.
- Each host must allow TCP and UDP network connectivity to and from other hosts that are running CoreDNS on UDP port 53 for service and pod DNS names.

Contents

cidrs

A network CIDR that can contain hybrid nodes.

These CIDR blocks define the expected IP address range of the hybrid nodes that join the cluster. These blocks are typically determined by your network administrator.

Enter one or more IPv4 CIDR blocks in decimal dotted-quad notation (for example, 10.2.0.0/16).

It must satisfy the following requirements:

- Each block must be within an IPv4 RFC-1918 network range. Minimum allowed size is /32, maximum allowed size is /8. Publicly-routable addresses aren't supported.
- Each block cannot overlap with the range of the VPC CIDR blocks for your EKS resources, or the block of the Kubernetes service IP range.
- Each block must have a route to the VPC that uses the VPC CIDR blocks, not public IPs or Elastic IPs. There are many options including Amazon Transit Gateway, Amazon Site-to-Site VPN, or Amazon Direct Connect.
- Each host must allow outbound connection to the EKS cluster control plane on TCP ports 443 and 10250.
- Each host must allow inbound connection from the EKS cluster control plane on TCP port 10250 for logs, exec and port-forward operations.
- Each host must allow TCP and UDP network connectivity to and from other hosts that are running CoreDNS on UDP port 53 for service and pod DNS names.

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](#)

RemotePodNetwork

Service: Amazon Elastic Kubernetes Service

A network CIDR that can contain pods that run Kubernetes webhooks on hybrid nodes.

These CIDR blocks are determined by configuring your Container Network Interface (CNI) plugin. We recommend the Calico CNI or Cilium CNI. Note that the Amazon VPC CNI plugin for Kubernetes isn't available for on-premises and edge locations.

Enter one or more IPv4 CIDR blocks in decimal dotted-quad notation (for example, 10.2.0.0/16).

It must satisfy the following requirements:

- Each block must be within an IPv4 RFC-1918 network range. Minimum allowed size is /32, maximum allowed size is /8. Publicly-routable addresses aren't supported.
- Each block cannot overlap with the range of the VPC CIDR blocks for your EKS resources, or the block of the Kubernetes service IP range.

Contents

cids

A network CIDR that can contain pods that run Kubernetes webhooks on hybrid nodes.

These CIDR blocks are determined by configuring your Container Network Interface (CNI) plugin. We recommend the Calico CNI or Cilium CNI. Note that the Amazon VPC CNI plugin for Kubernetes isn't available for on-premises and edge locations.

Enter one or more IPv4 CIDR blocks in decimal dotted-quad notation (for example, 10.2.0.0/16).

It must satisfy the following requirements:

- Each block must be within an IPv4 RFC-1918 network range. Minimum allowed size is /32, maximum allowed size is /8. Publicly-routable addresses aren't supported.
- Each block cannot overlap with the range of the VPC CIDR blocks for your EKS resources, or the block of the Kubernetes service IP range.

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](#)

StorageConfigRequest

Service: Amazon Elastic Kubernetes Service

Request to update the configuration of the storage capability of your EKS Auto Mode cluster. For example, enable the capability. For more information, see EKS Auto Mode block storage capability in the *Amazon EKS User Guide*.

Contents

blockStorage

Request to configure EBS Block Storage settings for your EKS Auto Mode cluster.

Type: [BlockStorage](#) 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](#)

StorageConfigResponse

Service: Amazon Elastic Kubernetes Service

Indicates the status of the request to update the block storage capability of your EKS Auto Mode cluster.

Contents

blockStorage

Indicates the current configuration of the block storage capability on your EKS Auto Mode cluster. For example, if the capability is enabled or disabled.

Type: [BlockStorage](#) 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](#)

Taint

Service: Amazon Elastic Kubernetes Service

A property that allows a node to repel a Pod. For more information, see [Node taints on managed node groups](#) in the *Amazon EKS User Guide*.

Contents

effect

The effect of the taint.

Type: String

Valid Values: NO_SCHEDULE | NO_EXECUTE | PREFER_NO_SCHEDULE

Required: No

key

The key of the taint.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

value

The value of the taint.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 63.

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](#)

Update

Service: Amazon Elastic Kubernetes Service

An object representing an asynchronous update.

Contents

createdAt

The Unix epoch timestamp at object creation.

Type: Timestamp

Required: No

errors

Any errors associated with a Failed update.

Type: Array of [ErrorDetail](#) objects

Required: No

id

A UUID that is used to track the update.

Type: String

Required: No

params

A key-value map that contains the parameters associated with the update.

Type: Array of [UpdateParam](#) objects

Required: No

status

The current status of the update.

Type: String

Valid Values: InProgress | Failed | Cancelled | Successful

Required: No

type

The type of the update.

Type: String

Valid Values: VersionUpdate | EndpointAccessUpdate | LoggingUpdate
| ConfigUpdate | AssociateIdentityProviderConfig |
DisassociateIdentityProviderConfig | AssociateEncryptionConfig |
AddonUpdate | VpcConfigUpdate | AccessConfigUpdate | UpgradePolicyUpdate
| ZonalShiftConfigUpdate | AutoModeUpdate | RemoteNetworkConfigUpdate

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](#)

UpdateAccessConfigRequest

Service: Amazon Elastic Kubernetes Service

The access configuration information for the cluster.

Contents

authenticationMode

The desired authentication mode for the cluster.

Type: String

Valid Values: API | API_AND_CONFIG_MAP | CONFIG_MAP

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](#)

UpdateLabelsPayload

Service: Amazon Elastic Kubernetes Service

An object representing a Kubernetes label change for a managed node group.

Contents

addOrUpdateLabels

The Kubernetes labels to add or update.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 63.

Value Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

removeLabels

The Kubernetes labels to remove.

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](#)

UpdateParam

Service: Amazon Elastic Kubernetes Service

An object representing the details of an update request.

Contents

type

The keys associated with an update request.

Type: String

Valid Values: Version | PlatformVersion | EndpointPrivateAccess | EndpointPublicAccess | ClusterLogging | DesiredSize | LabelsToAdd | LabelsToRemove | TaintsToAdd | TaintsToRemove | MaxSize | MinSize | ReleaseVersion | PublicAccessCidrs | LaunchTemplateName | LaunchTemplateVersion | IdentityProviderConfig | EncryptionConfig | AddonVersion | ServiceAccountRoleArn | ResolveConflicts | MaxUnavailable | MaxUnavailablePercentage | NodeRepairEnabled | UpdateStrategy | ConfigurationValues | SecurityGroups | Subnets | AuthenticationMode | PodIdentityAssociations | UpgradePolicy | ZonalShiftConfig | ComputeConfig | StorageConfig | KubernetesNetworkConfig | RemoteNetworkConfig

Required: No

value

The value of the keys submitted as part of an update request.

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](#)

UpdateTaintsPayload

Service: Amazon Elastic Kubernetes Service

An object representing the details of an update to a taints payload. For more information, see [Node taints on managed node groups](#) in the *Amazon EKS User Guide*.

Contents

addOrUpdateTaints

Kubernetes taints to be added or updated.

Type: Array of [Taint](#) objects

Required: No

removeTaints

Kubernetes taints to remove.

Type: Array of [Taint](#) 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](#)

UpgradePolicyRequest

Service: Amazon Elastic Kubernetes Service

The support policy to use for the cluster. Extended support allows you to remain on specific Kubernetes versions for longer. Clusters in extended support have higher costs. The default value is EXTENDED. Use STANDARD to disable extended support.

[Learn more about EKS Extended Support in the *Amazon EKS User Guide*.](#)

Contents

supportType

If the cluster is set to EXTENDED, it will enter extended support at the end of standard support.

If the cluster is set to STANDARD, it will be automatically upgraded at the end of standard support.

[Learn more about EKS Extended Support in the *Amazon EKS User Guide*.](#)

Type: String

Valid Values: STANDARD | EXTENDED

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](#)

UpgradePolicyResponse

Service: Amazon Elastic Kubernetes Service

This value indicates if extended support is enabled or disabled for the cluster.

[Learn more about EKS Extended Support in the *Amazon EKS User Guide*.](#)

Contents

supportType

If the cluster is set to EXTENDED, it will enter extended support at the end of standard support.

If the cluster is set to STANDARD, it will be automatically upgraded at the end of standard support.

[Learn more about EKS Extended Support in the *Amazon EKS User Guide*.](#)

Type: String

Valid Values: STANDARD | EXTENDED

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](#)

VpcConfigRequest

Service: Amazon Elastic Kubernetes Service

An object representing the VPC configuration to use for an Amazon EKS cluster.

Contents

endpointPrivateAccess

Set this value to `true` to enable private access for your cluster's Kubernetes API server endpoint. If you enable private access, Kubernetes API requests from within your cluster's VPC use the private VPC endpoint. The default value for this parameter is `false`, which disables private access for your Kubernetes API server. If you disable private access and you have nodes or Amazon Fargate pods in the cluster, then ensure that `publicAccessCidrs` includes the necessary CIDR blocks for communication with the nodes or Fargate pods. For more information, see [Cluster API server endpoint](#) in the [Amazon EKS User Guide](#).

Type: Boolean

Required: No

endpointPublicAccess

Set this value to `false` to disable public access to your cluster's Kubernetes API server endpoint. If you disable public access, your cluster's Kubernetes API server can only receive requests from within the cluster VPC. The default value for this parameter is `true`, which enables public access for your Kubernetes API server. The endpoint domain name and IP address family depends on the value of the `ipFamily` for the cluster. For more information, see [Cluster API server endpoint](#) in the [Amazon EKS User Guide](#).

Type: Boolean

Required: No

publicAccessCidrs

The CIDR blocks that are allowed access to your cluster's public Kubernetes API server endpoint. Communication to the endpoint from addresses outside of the CIDR blocks that you specify is denied. The default value is `0.0.0.0/0` and additionally `::/0` for dual-stack `IPv6` clusters. If you've disabled private endpoint access, make sure that you specify the necessary CIDR blocks for every node and Amazon Fargate Pod in the cluster. For more information, see [Cluster API server endpoint](#) in the [Amazon EKS User Guide](#).

Note that the public endpoints are dual-stack for only IPv6 clusters that are made after October 2024. You can't add IPv6 CIDR blocks to IPv4 clusters or IPv6 clusters that were made before October 2024.

Type: Array of strings

Required: No

securityGroupIds

Specify one or more security groups for the cross-account elastic network interfaces that Amazon EKS creates to use that allow communication between your nodes and the Kubernetes control plane. If you don't specify any security groups, then familiarize yourself with the difference between Amazon EKS defaults for clusters deployed with Kubernetes. For more information, see [Amazon EKS security group considerations](#) in the [Amazon EKS User Guide](#).

Type: Array of strings

Required: No

subnetIds

Specify subnets for your Amazon EKS nodes. Amazon EKS creates cross-account elastic network interfaces in these subnets to allow communication between your nodes and the Kubernetes control plane.

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](#)

VpcConfigResponse

Service: Amazon Elastic Kubernetes Service

An object representing an Amazon EKS cluster VPC configuration response.

Contents

clusterSecurityGroupId

The cluster security group that was created by Amazon EKS for the cluster. Managed node groups use this security group for control-plane-to-data-plane communication.

Type: String

Required: No

endpointPrivateAccess

This parameter indicates whether the Amazon EKS private API server endpoint is enabled. If the Amazon EKS private API server endpoint is enabled, Kubernetes API requests that originate from within your cluster's VPC use the private VPC endpoint instead of traversing the internet. If this value is disabled and you have nodes or Amazon Fargate pods in the cluster, then ensure that `publicAccessCidrs` includes the necessary CIDR blocks for communication with the nodes or Fargate pods. For more information, see [Cluster API server endpoint](#) in the [Amazon EKS User Guide](#).

Type: Boolean

Required: No

endpointPublicAccess

Whether the public API server endpoint is enabled.

Type: Boolean

Required: No

publicAccessCidrs

The CIDR blocks that are allowed access to your cluster's public Kubernetes API server endpoint. Communication to the endpoint from addresses outside of the CIDR blocks that you specify is denied. The default value is `0.0.0.0/0` and additionally `::/0` for dual-stack `IPv6` clusters. If

you've disabled private endpoint access, make sure that you specify the necessary CIDR blocks for every node and Amazon Fargate Pod in the cluster. For more information, see [Cluster API server endpoint](#) in the [Amazon EKS User Guide](#).

Note that the public endpoints are dual-stack for only IPv6 clusters that are made after October 2024. You can't add IPv6 CIDR blocks to IPv4 clusters or IPv6 clusters that were made before October 2024.

Type: Array of strings

Required: No

securityGroupIds

The security groups associated with the cross-account elastic network interfaces that are used to allow communication between your nodes and the Kubernetes control plane.

Type: Array of strings

Required: No

subnetIds

The subnets associated with your cluster.

Type: Array of strings

Required: No

vpcId

The VPC associated with your cluster.

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](#)

ZonalShiftConfigRequest

Service: Amazon Elastic Kubernetes Service

The configuration for zonal shift for the cluster.

Contents

enabled

If zonal shift is enabled, Amazon configures zonal autoshift for the cluster.

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](#)

ZonalShiftConfigResponse

Service: Amazon Elastic Kubernetes Service

The status of zonal shift configuration for the cluster

Contents

enabled

Whether the zonal shift is enabled.

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](#)

Amazon EKS Auth

The following data types are supported by Amazon EKS Auth:

- [AssumedRoleUser](#)
- [Credentials](#)
- [PodIdentityAssociation](#)
- [Subject](#)

AssumedRoleUser

Service: Amazon EKS Auth

An object with the permanent IAM role identity and the temporary session name.

Contents

arn

The ARN of the IAM role that the temporary credentials authenticate to.

Type: String

Required: Yes

assumeRoleId

The session name of the temporary session requested to Amazon STS. The value is a unique identifier that contains the role ID, a colon (:), and the role session name of the role that is being assumed. The role ID is generated by IAM when the role is created. The role session name part of the value follows this format: `eks-clusternamespace-podname-random UUID`

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](#)

Credentials

Service: Amazon EKS Auth

The *Amazon Signature Version 4* type of temporary credentials.

Contents

accessKeyId

The access key ID that identifies the temporary security credentials.

Type: String

Required: Yes

expiration

The Unix epoch timestamp in seconds when the current credentials expire.

Type: Timestamp

Required: Yes

secretAccessKey

The secret access key that applications inside the pods use to sign requests.

Type: String

Required: Yes

sessionToken

The token that applications inside the pods must pass to any service API to use the temporary credentials.

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](#)

PodIdentityAssociation

Service: Amazon EKS Auth

Amazon EKS Pod Identity associations provide the ability to manage credentials for your applications, similar to the way that Amazon EC2 instance profiles provide credentials to Amazon EC2 instances.

Contents

associationArn

The Amazon Resource Name (ARN) of the EKS Pod Identity association.

Type: String

Required: Yes

associationId

The ID of the association.

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](#)

Subject

Service: Amazon EKS Auth

An object containing the name of the Kubernetes service account inside the cluster to associate the IAM credentials with.

Contents

namespace

The name of the Kubernetes namespace inside the cluster to create the association in. The service account and the pods that use the service account must be in this namespace.

Type: String

Required: Yes

serviceAccount

The name of the Kubernetes service account inside the cluster to associate the IAM credentials with.

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](#)

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: 403

ExpiredTokenException

The security token included in the request is expired

HTTP Status Code: 403

IncompleteSignature

The request signature does not conform to Amazon standards.

HTTP Status Code: 403

InternalFailure

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

HTTP Status Code: 500

MalformedHttpRequestException

Problems with the request at the HTTP level, e.g. we can't decompress the body according to the decompression algorithm specified by the content-encoding.

HTTP Status Code: 400

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 401

OptInRequired

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

HTTP Status Code: 403

RequestAbortedException

Convenient exception that can be used when a request is aborted before a reply is sent back (e.g. client closed connection).

HTTP Status Code: 400

RequestEntityTooLargeException

Problems with the request at the HTTP level. The request entity is too large.

HTTP Status Code: 413

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

RequestTimeoutException

Problems with the request at the HTTP level. Reading the Request timed out.

HTTP Status Code: 408

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

UnrecognizedClientException

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

HTTP Status Code: 403

UnknownOperationException

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

HTTP Status Code: 404

ValidationException

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

HTTP Status Code: 400