aws

API Reference

Amazon EKS



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Amazon EKS: API Reference

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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 AWS 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:

- ActivateCertificateAuthority
- AssociateAccessPolicy
- AssociateEncryptionConfig
- AssociateIdentityProviderConfig
- CancelUpdate
- CreateAccessEntry
- CreateAddon
- CreateCapability
- CreateCertificateAuthority
- CreateCluster
- CreateEksAnywhereSubscription
- CreateFargateProfile
- CreateNodegroup
- CreatePodIdentityAssociation
- DeleteAccessEntry
- DeleteAddon
- DeleteCapability
- DeleteCertificateAuthority
- DeleteCluster
- DeleteEksAnywhereSubscription
- DeleteFargateProfile
- DeleteNodegroup
- DeletePodIdentityAssociation
- DeregisterCluster
- DescribeAccessEntry
- DescribeAddon
- DescribeAddonConfiguration

- DescribeAddonVersions
- DescribeCapability
- DescribeCertificateAuthority
- DescribeCluster
- DescribeClusterVersions
- DescribeEksAnywhereSubscription
- DescribeFargateProfile
- DescribeIdentityProviderConfig
- DescribeInsight
- DescribeInsightsRefresh
- DescribeNodegroup
- DescribePodIdentityAssociation
- DescribeUpdate
- DisassociateAccessPolicy
- DisassociateIdentityProviderConfig
- ListAccessEntries
- ListAccessPolicies
- ListAddons
- ListAssociatedAccessPolicies
- ListCapabilities
- ListCertificateAuthorities
- ListClusters
- ListEksAnywhereSubscriptions
- ListFargateProfiles
- ListIdentityProviderConfigs
- ListInsights
- ListNodegroups
- ListPodIdentityAssociations
- ListTagsForResource
- ListUpdates

- RegisterCluster
- StartInsightsRefresh
- TagResource
- UntagResource
- UpdateAccessEntry
- UpdateAddon
- UpdateCapability
- 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:

- ActivateCertificateAuthority
- AssociateAccessPolicy
- AssociateEncryptionConfig
- AssociateIdentityProviderConfig
- CancelUpdate
- CreateAccessEntry
- CreateAddon
- CreateCapability
- CreateCertificateAuthority
- CreateCluster

- CreateEksAnywhereSubscription
- CreateFargateProfile
- CreateNodegroup
- CreatePodIdentityAssociation
- DeleteAccessEntry
- DeleteAddon
- DeleteCapability
- DeleteCertificateAuthority
- DeleteCluster
- DeleteEksAnywhereSubscription
- DeleteFargateProfile
- DeleteNodegroup
- DeletePodIdentityAssociation
- DeregisterCluster
- DescribeAccessEntry
- DescribeAddon
- DescribeAddonConfiguration
- DescribeAddonVersions
- DescribeCapability
- DescribeCertificateAuthority
- DescribeCluster
- DescribeClusterVersions
- DescribeEksAnywhereSubscription
- DescribeFargateProfile
- DescribeIdentityProviderConfig
- DescribeInsight
- DescribeInsightsRefresh
- DescribeNodegroup
- DescribePodIdentityAssociation
- DescribeUpdate

- DisassociateAccessPolicy
- DisassociateIdentityProviderConfig
- ListAccessEntries
- ListAccessPolicies
- ListAddons
- ListAssociatedAccessPolicies
- ListCapabilities
- ListCertificateAuthorities
- ListClusters
- ListEksAnywhereSubscriptions
- ListFargateProfiles
- ListIdentityProviderConfigs
- ListInsights
- ListNodegroups
- ListPodIdentityAssociations
- ListTagsForResource
- ListUpdates
- RegisterCluster
- StartInsightsRefresh
- TagResource
- UntagResource
- UpdateAccessEntry
- UpdateAddon
- UpdateCapability
- UpdateClusterConfig
- UpdateClusterVersion
- UpdateEksAnywhereSubscription
- UpdateNodegroupConfig
- UpdateNodegroupVersion
- UpdatePodIdentityAssociation

ActivateCertificateAuthority

Service: Amazon Elastic Kubernetes Service

Activates a successor certificate authority (CA) as the signing certificate authority for your cluster, completing a CA rotation.

When you activate a successor CA, Amazon EKS promotes it to be the cluster's signer (its `signingStatus` becomes `IN_USE`) and the outgoing CA is retired (`NOT_USED`). The outgoing CA remains in the cluster's trust bundle but no longer signs certificates. The successor CA you activate must already be present on the cluster and fully distributed (its `distributionStatus` must be `COMPLETE`). This is an asynchronous operation that returns an `update` object you can track with `DescribeUpdate`.

Before you activate the successor CA, make sure the worker nodes you manage and your external clients have been updated to trust it, so they maintain connectivity to the API server after activation. For a limited period after activation, CA rollback is available to revert to the outgoing CA if needed. If you don't activate the successor CA yourself, Amazon EKS activates it automatically as the expiration deadline approaches. For more information, see Rotate the Amazon EKS cluster certificate authority in the *Amazon EKS User Guide*.

Request Syntax

```
POST /clusters/name/certificate-authorities/certificateAuthorityId/activate HTTP/1.1
Content-type: application/json

{
   "clientRequestToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

certificateAuthorityId

The ID of the certificate authority to activate as the cluster's signing certificate authority. This certificate authority must already exist on the cluster and have a `distributionStatus` of `COMPLETE`.

Required: Yes

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

Response Syntax

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

{
   "certificateAuthority": {
      "activatedAt": number,
      "activatedBy": "string",
      "createdAt": number,
      "createdBy": "string",
      "distributionStatus": "string",
      "id": "string",
      "signingStatus": "string"
   },
   "update": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

certificateAuthority

Summary information about the certificate authority that is being activated.

Type: CertificateAuthoritySummary object

update

An object representing the asynchronous update that promotes the certificate authority to be the cluster's signer.

Type: Update 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.

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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 activates the certificate authority with the ID `b2c3d4e5-6789-0abc-def0-1234567890ab` as the signing certificate authority for the cluster named `my-cluster`.

Sample Request

```
POST /clusters/my-cluster/certificate-authorities/b2c3d4e5-6789-0abc-def0-1234567890ab/
activate 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.activate-certificate-authority
X-Amz-Date: 20260729T193227Z
Authorization: AUTHPARAMS
Content-Length: 62

{
 "clientRequestToken": "5a8578bd-b6c1-4624-9e65-d0b70f857835"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 29 Jul 2026 19:32:43 GMT
Content-Type: application/json
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive
```

```
{
 "certificateAuthority": {
  "id": "b2c3d4e5-6789-0abc-def0-1234567890ab",
  "createdAt": 1785312515.848,
  "createdBy": "CUSTOMER",
  "signingStatus": "ACTIVATING",
  "distributionStatus": "COMPLETE"
 },
 "update": {
  "id": "2b3c4d5e-6789-90ab-cdef-EXAMPLE22222",
  "status": "InProgress",
  "type": "CertificateAuthorityUpdate",
  "params": [
   {
    "type": "ActiveCertificateAuthority",
    "value": "b2c3d4e5-6789-0abc-def0-1234567890ab"
   }
  ],
  "createdAt": 1785312515.848,
  "errors": []
 }
}
```


See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

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

{
   "accessScope": {
      "namespaces": [ "string" ],
      "type": "string"
   },
   "policyArn": "string"
}
```

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.

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to

AWS, 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-xxxxxxxxxxx
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-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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

{
   "clientRequestToken": "string",
   "encryptionConfig": [
      {
         "provider": {
            "keyArn": "string"
         },
         "resources": [ "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

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": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ThrottlingException

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

clusterName

The Amazon EKS cluster associated with the exception.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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 AWS 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": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ThrottlingException

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

clusterName

The Amazon EKS cluster associated with the exception.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

CancelUpdate

Service: Amazon Elastic Kubernetes Service

Cancels an in-progress update to an Amazon EKS cluster on a best-effort basis. Cancellation is only performed if the update can be cancelled. Currently, this is supported for `VersionRollback` update types on EKS Auto Mode clusters when nodes are rolling back.

A successful cancellation stops the node rollback. After cancellation, nodes converge to the current cluster version honoring configured disruption controls. If the control plane rollback has already begun, the cancellation request fails.

Request Syntax

```
POST /clusters/name/updates/updateId/cancel-update HTTP/1.1
Content-type: application/json

{
   "clientRequestToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

name

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

Required: Yes

updateId

The ID of the update to cancel.

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

Response Syntax

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

{
   "update": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

clusterName

The Amazon EKS cluster associated with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ThrottlingException

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

clusterName

The Amazon EKS cluster associated with the exception.

HTTP Status Code: 429

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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 cancels an in-progress update with the ID `9f771284-9e30-4886-b5b1-3789b6bea4dc` for the `my-cluster` cluster.

Sample Request

```
POST /clusters/my-cluster/updates/9f771284-9e30-4886-b5b1-3789b6bea4dc/cancel-update
 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.cancel-update
X-Amz-Date: 20250601T120000Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Sun, 01 Jun 2025 12:00:01 GMT
Content-Type: application/json
Content-Length: 300
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx
```

```
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
 "update": {
  "id": "9f771284-9e30-4886-b5b1-3789b6bea4dc",
  "status": "InProgress",
  "type": "VersionRollback",
  "params": [{
   "type": "Version",
   "value": "1.30"
  }],
  "createdAt": 1748764800.0,
  "errors": [],
  "cancellation": {
   "status": "InProgress"
  }
 }
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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

{
   "clientRequestToken": "string",
   "kubernetesGroups": [ "string" ],
   "principalArn": "string",
   "tags": {
      "string" : "string"
   },
   "type": "string",
   "username": "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

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 AWS 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.

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
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: FwFUDEhlPHcF4WQ=
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-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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",
   "namespaceConfig": {
      "namespace": "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

namespaceConfig

The namespace configuration for the addon. If specified, this will override the default namespace for the addon.

Type: AddonNamespaceConfigRequest object

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 AWS 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",
      "createdAt": number,
      "health": {
         "issues": [
            {
               "code": "string",
               "message": "string",
               "resourceIds": [ "string" ]
            }
         ]
      },
      "marketplaceInformation": {
         "productId": "string",
         "productUrl": "string"
      },
      "modifiedAt": number,
      "namespaceConfig": {
         "namespace": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: WkXriGcavHcFyqw=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

CreateCapability

Service: Amazon Elastic Kubernetes Service

Creates a managed capability resource for an Amazon EKS cluster.

Capabilities provide fully managed capabilities to build and scale with Kubernetes. When you create a capability, Amazon EKSprovisions and manages the infrastructure required to run the capability outside of your cluster. This approach reduces operational overhead and preserves cluster resources.

You can only create one Capability of each type on a given Amazon EKS cluster. Valid types are Argo CD for declarative GitOps deployment, AWS Controllers for Kubernetes (ACK) for resource management, and Kube Resource Orchestrator (KRO) for Kubernetes custom resource orchestration.

For more information, see EKS Capabilities in the *Amazon EKS User Guide*.

Request Syntax

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

{
   "capabilityName": "string",
   "clientRequestToken": "string",
   "configuration": {
      "ack": {
         "disabledServices": [ "string" ],
         "enableCrossNamespace": boolean
      },
      "argoCd": {
         "awsIdc": {
            "idcInstanceArn": "string",
            "idcRegion": "string"
         },
         "endpointPrefix": "string",
         "namespace": "string",
         "networkAccess": {
            "vpceIds": [ "string" ]
         },
         "rbacRoleMappings": [
            {
```

```
                "identities": [
                   {
                      "id": "string",
                      "type": "string"
                   }
                ],
                "role": "string"
             }
          ]
       }
    },
    "deletePropagationPolicy": "string",
    "roleArn": "string",
    "tags": {
       "string" : "string"
    },
    "type": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of the Amazon EKS cluster where you want to create the capability.

Required: Yes

Request Body

The request accepts the following data in JSON format.

capabilityName

A unique name for the capability. The name must be unique within your cluster and can contain alphanumeric characters, hyphens, and underscores.

Type: String

Required: Yes

clientRequestToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request. This token is valid for 24 hours after creation. If you retry a request with the same client request token and the same parameters after the original request has completed successfully, the result of the original request is returned.

Type: String

Required: No

configuration

The configuration settings for the capability. The structure of this object varies depending on the capability type. For Argo CD capabilities, you can configure IAM Identity CenterIAM; Identity Center integration, RBAC role mappings, and network access settings.

Type: CapabilityConfigurationRequest object

Required: No

deletePropagationPolicy

Specifies how Kubernetes resources managed by the capability should be handled when the capability is deleted. Currently, the only supported value is `RETAIN` which retains all Kubernetes resources managed by the capability when the capability is deleted.

Because resources are retained, all Kubernetes resources created by the capability should be deleted from the cluster before deleting the capability itself. After the capability is deleted, these resources become difficult to manage because the controller is no longer available.

Type: String

Valid Values: `RETAIN`

Required: Yes

roleArn

The Amazon Resource Name (ARN) of the IAM role that the capability uses to interact with AWS services. This role must have a trust policy that allows the EKS service principal to assume it, and it must have the necessary permissions for the capability type you're creating.

For ACK capabilities, the role needs permissions to manage the resources you want to control through Kubernetes. For Argo CD capabilities, the role needs permissions to access Git repositories and Secrets Manager. For KRO capabilities, the role needs permissions based on the resources you'll be orchestrating.

Type: String

Required: Yes

tags

The metadata that you apply to a resource to help you categorize and organize them. Each tag consists of a key and an optional value. You define them.

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 AWS 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

type

The type of capability to create. Valid values are:

- ACK – AWS Controllers for Kubernetes (ACK), which lets you manage resources directly from Kubernetes.
- ARGOCD – Argo CD for GitOps-based continuous delivery.
- KRO – Kube Resource Orchestrator (KRO) for composing and managing custom Kubernetes resources.

Type: String

Valid Values: `ACK` | `KRO` | `ARGOCD`

Required: Yes

Response Syntax

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

{
   "capability": {
      "arn": "string",
      "capabilityName": "string",
      "clusterName": "string",
      "configuration": {
         "ack": {
            "disabledServices": [ "string" ],
            "enableCrossNamespace": boolean
         },
         "argoCd": {
            "awsIdc": {
               "idcInstanceArn": "string",
               "idcManagedApplicationArn": "string",
               "idcRegion": "string"
            },
            "endpointPrefix": "string",
            "namespace": "string",
            "networkAccess": {
               "vpceIds": [ "string" ]
            },
            "rbacRoleMappings": [
               {
                  "identities": [
                     {
```

```
                        "id": "string",
                        "type": "string"
                     }
                  ],
                  "role": "string"
               }
            ],
            "serverUrl": "string"
         }
      },
      "createdAt": number,
      "deletePropagationPolicy": "string",
      "health": {
         "issues": [
            {
               "code": "string",
               "message": "string"
            }
         ]
      },
      "modifiedAt": number,
      "roleArn": "string",
      "status": "string",
      "tags": {
         "string" : "string"
      },
      "type": "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.

capability

An object containing information about the newly created capability, including its name, ARN, status, and configuration.

Type: Capability 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*.

message

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ThrottlingException

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

clusterName

The Amazon EKS cluster associated with the exception.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

CreateCertificateAuthority

Service: Amazon Elastic Kubernetes Service

Appends a successor certificate authority (CA) to your cluster, beginning the CA rotation process.

A cluster certificate authority is the root of trust for your cluster's control plane. It signs the certificates that secure communication between the Kubernetes API server and its clients, and its public certificate is distributed to your cluster's trust bundle so that worker nodes and clients can verify the API server's identity. Each cluster can have at most two certificate authorities at a time: the outgoing CA that's currently signing (its `signingStatus` is `IN_USE`) and one successor CA (`signingStatus` of `NOT_USED`) that you can later activate to complete the rotation.

Appending a successor CA adds its public certificate to the cluster's trust bundle so that the cluster trusts both CAs simultaneously (the dual trust period), but it doesn't begin signing certificates. Amazon EKS then distributes the successor CA to the AWS managed components in your cluster; you can track this through the CA's `distributionStatus`. The successor CA can't be activated until its `distributionStatus` is `COMPLETE`. To activate it as the cluster's signer, use `ActivateCertificateAuthority`. This is an asynchronous operation that returns an `update` object. If you don't append a successor CA yourself, Amazon EKS appends one automatically before the outgoing CA approaches expiration.

For more information, see Rotate the Amazon EKS cluster certificate authority in the *Amazon EKS User Guide*.

Request Syntax

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

{
   "clientRequestToken": "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

Response Syntax

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

{
   "certificateAuthority": {
      "activatedAt": number,
      "activatedBy": "string",
      "createdAt": number,
      "createdBy": "string",
      "distributionStatus": "string",
      "id": "string",
      "signingStatus": "string"
   },
   "update": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

certificateAuthority

Summary information about the certificate authority that was created, including its ID and initial signing and distribution status.

Type: CertificateAuthoritySummary object

update

An object representing the asynchronous update that adds the certificate authority to the cluster's trust bundle.

Type: Update 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.

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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 certificate authority for the cluster named `my-cluster`.

Sample Request

```
POST /clusters/my-cluster/certificate-authorities 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-certificate-authority
X-Amz-Date: 20260729T193227Z
Authorization: AUTHPARAMS
Content-Length: 62

{
 "clientRequestToken": "5a8578bd-b6c1-4624-9e65-d0b70f857835"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 29 Jul 2026 19:32:43 GMT
Content-Type: application/json
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
 "certificateAuthority": {
  "id": "b2c3d4e5-6789-0abc-def0-1234567890ab",
  "createdAt": 1785312515.848,
  "createdBy": "CUSTOMER",
  "signingStatus": "NOT_USED",
  "distributionStatus": "IN_PROGRESS"
 },
 "update": {
  "id": "1a2b3c4d-5678-90ab-cdef-EXAMPLE11111",
  "status": "InProgress",
  "type": "CertificateAuthorityUpdate",
```

```
  "params": [
   {
    "type": "CertificateAuthorityId",
    "value": "b2c3d4e5-6789-0abc-def0-1234567890ab"
   }
  ],
  "createdAt": 1785312515.848,
  "errors": []
 }
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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 AWS, 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 AWS 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"
   },
   "controlPlaneScalingConfig": {
      "tier": "string"
   },
   "deletionProtection": boolean,
   "encryptionConfig": [
      {
         "provider": {
            "keyArn": "string"
         },
         "resources": [ "string" ]
      }
   ],
   "kubeApiServerConfig": {
      "eventTtl": "string",
      "serviceNodePortRange": {
         "maxPort": number,
         "minPort": number
      }
   },
   "kubeControllerManagerConfig": {
      "horizontalPodAutoscalerControllerConfig": {
         "horizontalPodAutoscalerSyncPeriod": "string"
      },
      "podGcControllerConfig": {
         "terminatedPodGcThreshold": number
      }
```

```
    },
    "kubernetesNetworkConfig": {
       "elasticLoadBalancing": {
          "enabled": boolean,
          "gatewayApi": {
             "crds": {
                "managed": boolean
             }
          }
       },
       "ipFamily": "string",
       "serviceIpv4Cidr": "string"
    },
    "kubeSchedulerConfig": {
       "nodeResourcesFit": {
          "scoringStrategy": {
             "resources": [
                {
                   "name": "string",
                   "weight": number
                }
             ],
             "type": "string"
          }
       }
    },
    "logging": {
       "clusterLogging": [
          {
             "enabled": boolean,
             "types": [ "string" ]
          }
       ]
    },
    "name": "string",
    "outpostConfig": {
       "controlPlaneInstanceType": "string",
       "controlPlanePlacement": {
          "groupName": "string",
          "spreadLevel": "string"
       },
       "etcdInstanceType": "string",
       "etcdPlacement": {
          "spreadLevel": "string"
```

```
      },
      "outpostArns": [ "string" ]
   },
   "remoteNetworkConfig": {
      "remoteNodeNetworks": [
         {
            "cidrs": [ "string" ]
         }
      ],
      "remotePodNetworks": [
         {
            "cidrs": [ "string" ]
         }
      ]
   },
   "resourcesVpcConfig": {
      "controlPlaneEgressMode": "string",
      "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 AWS account

Type: ComputeConfigRequest object

Required: No

controlPlaneScalingConfig

The control plane scaling tier configuration. For more information, see EKS Provisioned Control Plane in the Amazon EKS User Guide.

Type: ControlPlaneScalingConfig object

Required: No

deletionProtection

Indicates whether to enable deletion protection for the cluster. When enabled, the cluster cannot be deleted unless deletion protection is first disabled. This helps prevent accidental cluster deletion. Default value is `false`.

Type: Boolean

Required: No

encryptionConfig

The encryption configuration for the cluster.

Type: Array of EncryptionConfig objects

Array Members: Maximum number of 1 item.

Required: No

kubeApiServerConfig

The Kubernetes API server configuration for the new cluster.

Type: KubeApiServerConfigRequest object

Required: No

kubeControllerManagerConfig

The Kubernetes controller manager configuration for the new cluster.

Type: KubeControllerManagerConfigRequest object

Required: No

kubernetesNetworkConfig

The Kubernetes network configuration for the cluster.

Type: KubernetesNetworkConfigRequest object

Required: No

kubeSchedulerConfig

The Kubernetes scheduler configuration for the new cluster.

Type: KubeSchedulerConfigRequest 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 AWS Region and AWS 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 AWS Outpost. Before creating a local cluster on an Outpost, review Local clusters for Amazon EKS on AWS Outposts in the *Amazon EKS User Guide*. This object isn't available for creating Amazon EKS clusters on the AWS 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 AWS 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 AWS 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 AWS 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, AWS 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 AWS 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

{
   "cluster": {
      "accessConfig": {
         "authenticationMode": "string",
         "bootstrapClusterCreatorAdminPermissions": boolean
      },
      "arn": "string",
      "certificateAuthority": {
         "active": {
            "activatedBy": "string",
            "id": "string"
         },
         "data": "string"
```

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

```
            "eventTtl": "string",
            "serviceNodePortRange": {
               "maxPort": number,
               "minPort": number
            }
         },
         "kubeControllerManagerConfig": {
            "horizontalPodAutoscalerControllerConfig": {
               "horizontalPodAutoscalerSyncPeriod": "string"
            },
            "podGcControllerConfig": {
               "terminatedPodGcThreshold": number
            }
         },
         "kubernetesNetworkConfig": {
            "elasticLoadBalancing": {
               "enabled": boolean,
               "gatewayApi": {
                  "crds": {
                     "managed": boolean
                  }
               }
            },
            "ipFamily": "string",
            "serviceIpv4Cidr": "string",
            "serviceIpv6Cidr": "string"
         },
         "kubeSchedulerConfig": {
            "nodeResourcesFit": {
               "scoringStrategy": {
                  "resources": [
                     {
                        "name": "string",
                        "weight": number
                     }
                  ],
                  "type": "string"
               }
            }
         },
         "logging": {
            "clusterLogging": [
               {
                  "enabled": boolean,
```

```
            "types": [ "string" ]
         }
      ]
   },
   "name": "string",
   "outpostConfig": {
      "controlPlaneInstanceType": "string",
      "controlPlanePlacement": {
         "groupName": "string",
         "spreadLevel": "string"
      },
      "etcdInstanceType": "string",
      "etcdPlacement": {
         "spreadLevel": "string"
      },
      "outpostArns": [ "string" ]
   },
   "platformVersion": "string",
   "remoteNetworkConfig": {
      "remoteNodeNetworks": [
         {
            "cidrs": [ "string" ]
         }
      ],
      "remotePodNetworks": [
         {
            "cidrs": [ "string" ]
         }
      ]
   },
   "resourcesVpcConfig": {
      "clusterSecurityGroupId": "string",
      "controlPlaneEgressMode": "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

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.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

validZones

The supported Availability Zones for your account. Choose subnets in these Availability Zones for your cluster.

HTTP Status Code: 400

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxxxxxxx",
            "subnet-yyyyyyyyyyyyyyyy",
            "subnet-zzzzzzzzzzzzzzzz"
        ],
        "securityGroupIds": [
            "sg-xxxxxxxxxxxxxxxx"
        ],
        "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-xxxxxxxxxxx
x-amz-apigw-id: W84GUEIbPHcFW2Q=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
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-xxxxxxxxxxxxxxxx",
        "subnet-yyyyyyyyyyyyyyyy",
        "subnet-zzzzzzzzzzzzzzzz"
      ],
      "securityGroupIds": [],
      "vpcId": "vpc-xxxxxxxxxxxxxxxx",
      "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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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 AWS 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 AWS account in the AWS 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

CreateFargateProfile

Service: Amazon Elastic Kubernetes Service

Creates an AWS 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 AWS 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 AWS 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

validZones

The supported Availability Zones for your account. Choose subnets in these Availability Zones for your cluster.

HTTP Status Code: 400

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxxxxxxx",
    "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-xxxxxxxxxxx
x-amz-apigw-id: DeaRjFWPvHcFcXw=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
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-xxxxxxxxxxxxxxxx",
      "subnet-yyyyyyyyyyyyyyyy"
    ],
    "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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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 AWS 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 AWS Regions that support Windows on Amazon EKS.

Request Syntax

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

{
   "amiType": "string",
   "capacityType": "string",
   "clientRequestToken": "string",
   "diskSize": number,
   "instanceTypes": [ "string" ],
   "labels": {
      "string" : "string"
   },
   "launchTemplate": {
      "id": "string",
```

```
      "name": "string",
      "version": "string"
   },
   "nodegroupName": "string",
   "nodeRepairConfig": {
      "enabled": boolean,
      "maxParallelNodesRepairedCount": number,
      "maxParallelNodesRepairedPercentage": number,
      "maxUnhealthyNodeThresholdCount": number,
      "maxUnhealthyNodeThresholdPercentage": number,
      "nodeRepairConfigOverrides": [
         {
            "minRepairWaitTimeMins": number,
            "nodeMonitoringCondition": "string",
            "nodeUnhealthyReason": "string",
            "repairAction": "string"
         }
      ]
   },
   "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",
   "warmPoolConfig": {
      "enabled": boolean,
      "maxGroupPreparedCapacity": number,
      "minSize": number,
      "poolState": "string",
      "reuseOnScaleIn": boolean
   }
}
```

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 | BOTTLEROCKET_ARM_64_NVIDIA_FIPS`

| BOTTLEROCKET_x86_64_NVIDIA_FIPS | WINDOWS_CORE_2019_x86_64 | WINDOWS_FULL_2019_x86_64 | WINDOWS_CORE_2022_x86_64 | WINDOWS_FULL_2022_x86_64 | WINDOWS_CORE_2025_x86_64 | WINDOWS_FULL_2025_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 AWS 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 AWS 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

warmPoolConfig

The warm pool configuration for the node group. Warm pools maintain pre-initialized EC2 instances that can quickly join your cluster during scale-out events, improving application scaling performance and reducing costs.

Type: WarmPoolConfig object

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,
         "maxParallelNodesRepairedCount": number,
         "maxParallelNodesRepairedPercentage": number,
         "maxUnhealthyNodeThresholdCount": number,
         "maxUnhealthyNodeThresholdPercentage": number,
         "nodeRepairConfigOverrides": [
            {
               "minRepairWaitTimeMins": number,
               "nodeMonitoringCondition": "string",
```

```
            "nodeUnhealthyReason": "string",
            "repairAction": "string"
         }
      ]
   },
   "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",
   "warmPoolConfig": {
      "enabled": boolean,
```

```
            "maxGroupPreparedCapacity": number,
            "minSize": number,
            "poolState": "string",
            "reuseOnScaleIn": 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.

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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxxxxxxx", "subnet-
yyyyyyyyyyyyyyyy", "subnet-zzzzzzzzzzzzzzzz"],
 "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-xxxxxxxxxxx
x-amz-apigw-id: DAc5BGsWvHcF_bw=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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-xxxxxxxxxxx",
  "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-xxxxxxxxxxxxxxxx", "subnet-
yyyyyyyyyyyyyyyy", "subnet-zzzzzzzzzzzzzzzz"],
  "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-nnnnnnnnnnnnnnnn", "subnet-xxxxxxxxxxxxxxxx", "subnet-
yyyyyyyyyyyyyyyy", "subnet-zzzzzzzzzzzzzzzz"],
 "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-xxxxxxxxxxx
x-amz-apigw-id: DAc5BGsWvHcF_bw=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
 "nodegroup": {
  "nodegroupName": "my-nodegroup",
  "nodegroupArn": "arn:aws:eks:us-west-2:012345678910:nodegroup/my-cluster/my-
nodegroup/xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx",
  "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-nnnnnnnnnnnnnnnn", "subnet-xxxxxxxxxxxxxxxx", "subnet-
yyyyyyyyyyyyyyyy", "subnet-zzzzzzzzzzzzzzzz"],
  "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-xxxxxxxxxxxxxxxx"
  },
  "tags": {}
 }
```

```
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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 AWS SDKs, including the AWS 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 AWS 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 AWS account.

Request Syntax

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

{
   "clientRequestToken": "string",
   "disableSessionTags": boolean,
```

```
    "namespace": "string",
    "policy": "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 AWS 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*.

AWS 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

policy

An optional IAM policy in JSON format (as an escaped string) that applies additional restrictions to this pod identity association beyond the IAM policies attached to the IAM role. This policy is applied as the intersection of the role's policies and this policy, allowing you to reduce the permissions that applications in the pods can use. Use this policy to enforce least privilege access while still leveraging a shared IAM role across multiple applications.

Important considerations

- **Session tags:** When using this policy, `disableSessionTags` must be set to `true`.
- **Target role permissions:** If you specify both a `TargetRoleArn` and a policy, the policy restrictions apply only to the target role's permissions, not to the initial role used for assuming the target role.

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: 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 AWS 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 AWS 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 AWS resources from a different role that exists in the same or different AWS 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 AWS 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",
      "policy": "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.

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
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-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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,
      "namespaceConfig": {
         "namespace": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: WkahaEGlvHcF1zA=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

DeleteCapability

Service: Amazon Elastic Kubernetes Service

Deletes a managed capability from your Amazon EKS cluster. When you delete a capability, Amazon EKS removes the capability infrastructure but retains all resources that were managed by the capability.

Before deleting a capability, you should delete all Kubernetes resources that were created by the capability. After the capability is deleted, these resources become difficult to manage because the controller that managed them is no longer available. To delete resources before removing the capability, use `kubectl delete` or remove them through your GitOps workflow.

Request Syntax

```
DELETE /clusters/name/capabilities/capabilityName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

capabilityName

The name of the capability to delete.

Required: Yes

name

The name of the Amazon EKS cluster that contains the capability you want to delete.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
```

```
  "capability": {
     "arn": "string",
     "capabilityName": "string",
     "clusterName": "string",
     "configuration": {
        "ack": {
           "disabledServices": [ "string" ],
           "enableCrossNamespace": boolean
        },
        "argoCd": {
           "awsIdc": {
              "idcInstanceArn": "string",
              "idcManagedApplicationArn": "string",
              "idcRegion": "string"
           },
           "endpointPrefix": "string",
           "namespace": "string",
           "networkAccess": {
              "vpceIds": [ "string" ]
           },
           "rbacRoleMappings": [
              {
                 "identities": [
                    {
                       "id": "string",
                       "type": "string"
                    }
                 ],
                 "role": "string"
              }
           ],
           "serverUrl": "string"
        }
     },
     "createdAt": number,
     "deletePropagationPolicy": "string",
     "health": {
        "issues": [
           {
              "code": "string",
              "message": "string"
           }
        ]
     },
```

```
      "modifiedAt": number,
      "roleArn": "string",
      "status": "string",
      "tags": {
         "string" : "string"
      },
      "type": "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.

capability

An object containing information about the deleted capability, including its final status and configuration.

Type: Capability 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*.

message

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

DeleteCertificateAuthority

Service: Amazon Elastic Kubernetes Service

Deletes a certificate authority (CA) from your cluster.

Deleting a certificate authority removes its public certificate from the cluster's trust bundle. You can't delete the certificate authority that's currently signing certificates for the cluster (its `signingStatus` is `IN_USE`) — to remove the outgoing CA, first activate the successor CA with `ActivateCertificateAuthority`. Amazon EKS also protects a successor CA from deletion in certain cases to keep a valid rotation path — for example, a successor that Amazon EKS appended can't be deleted while it's the only successor on the cluster. This is an asynchronous operation that returns an `update` object.

Request Syntax

```
DELETE /clusters/name/certificate-authorities/certificateAuthorityId?
clientRequestToken=clientRequestToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

certificateAuthorityId

The ID of the certificate authority to delete. You can't delete the certificate authority that's currently signing certificates for the cluster.

Required: Yes

clientRequestToken

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

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

{
   "certificateAuthority": {
      "activatedAt": number,
      "activatedBy": "string",
      "createdAt": number,
      "createdBy": "string",
      "distributionStatus": "string",
      "id": "string",
      "signingStatus": "string"
   },
   "update": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

certificateAuthority

Summary information about the certificate authority that is being deleted.

Type: CertificateAuthoritySummary object

update

An object representing the asynchronous update that removes the certificate authority from the cluster's trust bundle.

Type: Update 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.

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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 the trusted certificate authority with the ID `b2c3d4e5-6789-0abc-def0-1234567890ab` from the cluster named `my-cluster`.

Sample Request

```
DELETE /clusters/my-cluster/certificate-authorities/b2c3d4e5-6789-0abc-
def0-1234567890ab?clientRequestToken=5a8578bd-b6c1-4624-9e65-d0b70f857835 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-certificate-authority
X-Amz-Date: 20260729T193227Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 29 Jul 2026 19:32:43 GMT
Content-Type: application/json
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
 "certificateAuthority": {
  "id": "b2c3d4e5-6789-0abc-def0-1234567890ab",
  "createdAt": 1785312515.848,
  "createdBy": "CUSTOMER",
  "signingStatus": "NOT_USED",
  "distributionStatus": "DELETING"
 },
 "update": {
  "id": "3c4d5e6f-6789-90ab-cdef-EXAMPLE33333",
  "status": "InProgress",
```

```
  "type": "CertificateAuthorityUpdate",
  "params": [
   {
    "type": "CertificateAuthorityId",
    "value": "b2c3d4e5-6789-0abc-def0-1234567890ab"
   }
  ],
  "createdAt": 1785312515.848,
  "errors": []
 }
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

DeleteCluster

Service: Amazon Elastic Kubernetes Service

Deletes an Amazon EKS cluster control plane.

If you have active services and ingress resources 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 `DeleteNodgroup` 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

{
   "cluster": {
      "accessConfig": {
         "authenticationMode": "string",
```

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

```
            ]
         },
         "id": "string",
         "identity": {
            "oidc": {
               "issuer": "string"
            }
         },
         "kubeApiServerConfig": {
            "eventTtl": "string",
            "serviceNodePortRange": {
               "maxPort": number,
               "minPort": number
            }
         },
         "kubeControllerManagerConfig": {
            "horizontalPodAutoscalerControllerConfig": {
               "horizontalPodAutoscalerSyncPeriod": "string"
            },
            "podGcControllerConfig": {
               "terminatedPodGcThreshold": number
            }
         },
         "kubernetesNetworkConfig": {
            "elasticLoadBalancing": {
               "enabled": boolean,
               "gatewayApi": {
                  "crds": {
                     "managed": boolean
                  }
               }
            },
            "ipFamily": "string",
            "serviceIpv4Cidr": "string",
            "serviceIpv6Cidr": "string"
         },
         "kubeSchedulerConfig": {
            "nodeResourcesFit": {
               "scoringStrategy": {
                  "resources": [
                     {
                        "name": "string",
                        "weight": number
                     }
```

```
            ],
            "type": "string"
         }
      }
   },
   "logging": {
      "clusterLogging": [
         {
            "enabled": boolean,
            "types": [ "string" ]
         }
      ]
   },
   "name": "string",
   "outpostConfig": {
      "controlPlaneInstanceType": "string",
      "controlPlanePlacement": {
         "groupName": "string",
         "spreadLevel": "string"
      },
      "etcdInstanceType": "string",
      "etcdPlacement": {
         "spreadLevel": "string"
      },
      "outpostArns": [ "string" ]
   },
   "platformVersion": "string",
   "remoteNetworkConfig": {
      "remoteNodeNetworks": [
         {
            "cidrs": [ "string" ]
         }
      ],
      "remotePodNetworks": [
         {
            "cidrs": [ "string" ]
         }
      ]
   },
   "resourcesVpcConfig": {
      "clusterSecurityGroupId": "string",
      "controlPlaneEgressMode": "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: HxlgjH_rPHcF7ag=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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.yl4.us-
west-2.eks.amazonaws.com",
        "roleArn": "arn:aws:iam::012345678910:role/eksClusterRole",
        "resourcesVpcConfig": {
            "subnetIds": [
                "subnet-xxxxxxxxxxxxxxxx",
                "subnet-yyyyyyyyyyyyyyyyy",
                "subnet-zzzzzzzzzzzzzzzz"
            ],
            "securityGroupIds": [
                "sg-xxxxxxxxxxxxxxxx"
            ],
            "clusterSecurityGroupId": "sg-yyyyyyyyyyyyyyyyy",
            "vpcId": "vpc-xxxxxxxxxxxxxxxx",
            "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/
XXXXXXXXXXXXX097E4AC3A07B6B79B9C"
            }
        },
        "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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

DeleteEksAnywhereSubscription

Service: Amazon Elastic Kubernetes Service

Deletes an expired or inactive subscription. Deleting inactive subscriptions removes them from the AWS 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 AWS 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": {
      "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 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

DeleteFargateProfile

Service: Amazon Elastic Kubernetes Service

Deletes an AWS 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: DeaRjFWPvHcFcXw=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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-xxxxxxxxxxxxxxxx",
      "subnet-yyyyyyyyyyyyyyyy"
    ],
    "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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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,
         "maxParallelNodesRepairedCount": number,
         "maxParallelNodesRepairedPercentage": number,
         "maxUnhealthyNodeThresholdCount": number,
         "maxUnhealthyNodeThresholdPercentage": number,
         "nodeRepairConfigOverrides": [
            {
               "minRepairWaitTimeMins": number,
               "nodeMonitoringCondition": "string",
               "nodeUnhealthyReason": "string",
               "repairAction": "string"
            }
         ]
      },
      "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",
      "warmPoolConfig": {
         "enabled": boolean,
         "maxGroupPreparedCapacity": number,
         "minSize": number,
         "poolState": "string",
         "reuseOnScaleIn": 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.

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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: DAuf9GbEPHcFxNw=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "nodegroup" : {
    "nodegroupName" : "standard",
    "nodegroupArn" : "arn:aws:eks:us-west-2:012345678910:nodegroup/my-cluster/standard/
xxxxxxxx-xxxx-xxxx-xxxxxxxxxxxxxxxx",
    "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-xxxxxxxxxxxxxxxx", "subnet-yyyyyyyyyyyyyyyyy", "subnet-
zzzzzzzzzzzzzzzz" ],
    "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-xxxxxxxxxxxxxxxx"
    },
```

```
    "diskSize" : 20,
    "health" : {
      "issues" : [ ]
    },
    "tags" : { }
  }
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

DeletePodIdentityAssociation

Service: Amazon Elastic Kubernetes Service

Deletes a EKS Pod Identity association.

The temporary AWS 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

{
   "association": {
```

```
      "associationArn": "string",
      "associationId": "string",
      "clusterName": "string",
      "createdAt": number,
      "disableSessionTags": boolean,
      "externalId": "string",
      "modifiedAt": number,
      "namespace": "string",
      "ownerArn": "string",
      "policy": "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.

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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

{
   "cluster": {
      "accessConfig": {
         "authenticationMode": "string",
         "bootstrapClusterCreatorAdminPermissions": boolean
      },
      "arn": "string",
      "certificateAuthority": {
         "active": {
            "activatedBy": "string",
            "id": "string"
```

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

```
      },
      "kubeApiServerConfig": {
         "eventTtl": "string",
         "serviceNodePortRange": {
            "maxPort": number,
            "minPort": number
         }
      },
      "kubeControllerManagerConfig": {
         "horizontalPodAutoscalerControllerConfig": {
            "horizontalPodAutoscalerSyncPeriod": "string"
         },
         "podGcControllerConfig": {
            "terminatedPodGcThreshold": number
         }
      },
      "kubernetesNetworkConfig": {
         "elasticLoadBalancing": {
            "enabled": boolean,
            "gatewayApi": {
               "crds": {
                  "managed": boolean
               }
            }
         },
         "ipFamily": "string",
         "serviceIpv4Cidr": "string",
         "serviceIpv6Cidr": "string"
      },
      "kubeSchedulerConfig": {
         "nodeResourcesFit": {
            "scoringStrategy": {
               "resources": [
                  {
                     "name": "string",
                     "weight": number
                  }
               ],
               "type": "string"
            }
         }
      },
      "logging": {
         "clusterLogging": [
```

```
            {
               "enabled": boolean,
               "types": [ "string" ]
            }
         ]
      },
      "name": "string",
      "outpostConfig": {
         "controlPlaneInstanceType": "string",
         "controlPlanePlacement": {
            "groupName": "string",
            "spreadLevel": "string"
         },
         "etcdInstanceType": "string",
         "etcdPlacement": {
            "spreadLevel": "string"
         },
         "outpostArns": [ "string" ]
      },
      "platformVersion": "string",
      "remoteNetworkConfig": {
         "remoteNodeNetworks": [
            {
               "cidrs": [ "string" ]
            }
         ],
         "remotePodNetworks": [
            {
               "cidrs": [ "string" ]
            }
         ]
      },
      "resourcesVpcConfig": {
         "clusterSecurityGroupId": "string",
         "controlPlaneEgressMode": "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*.

message

You do not have sufficient access to perform this action.

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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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",
      "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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
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-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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-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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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,
      "namespaceConfig": {
         "namespace": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: WkY-BEEPPHcFwEg=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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.

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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=nextTok
 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
            }
         ],
         "defaultNamespace": "string",
         "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.

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: WkXM1FDXvHcFaHg=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

DescribeCapability

Service: Amazon Elastic Kubernetes Service

Returns detailed information about a specific managed capability in your Amazon EKS cluster, including its current status, configuration, health information, and any issues that may be affecting its operation.

Request Syntax

```
GET /clusters/name/capabilities/capabilityName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

capabilityName

The name of the capability to describe.

Required: Yes

name

The name of the Amazon EKS cluster that contains the capability you want to describe.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "capability": {
      "arn": "string",
      "capabilityName": "string",
      "clusterName": "string",
      "configuration": {
         "ack": {
```

```
            "disabledServices": [ "string" ],
            "enableCrossNamespace": boolean
         },
         "argoCd": {
            "awsIdc": {
               "idcInstanceArn": "string",
               "idcManagedApplicationArn": "string",
               "idcRegion": "string"
            },
            "endpointPrefix": "string",
            "namespace": "string",
            "networkAccess": {
               "vpceIds": [ "string" ]
            },
            "rbacRoleMappings": [
               {
                  "identities": [
                     {
                        "id": "string",
                        "type": "string"
                     }
                  ],
                  "role": "string"
               }
            ],
            "serverUrl": "string"
         }
      },
      "createdAt": number,
      "deletePropagationPolicy": "string",
      "health": {
         "issues": [
            {
               "code": "string",
               "message": "string"
            }
         ]
      },
      "modifiedAt": number,
      "roleArn": "string",
      "status": "string",
      "tags": {
         "string" : "string"
      },
```

```
      "type": "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.

capability

An object containing detailed information about the capability, including its name, ARN, type, status, version, configuration, health status, and timestamps for when it was created and last modified.

Type: Capability 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*.

message

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS SDK for Ruby V3

DescribeCertificateAuthority

Service: Amazon Elastic Kubernetes Service

Returns detailed information about a certificate authority (CA) in your cluster, including its validity period, signing and distribution status, provenance, scheduled auto-activation events, and public certificate data.

Request Syntax

```
GET /clusters/name/certificate-authorities/certificateAuthorityId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

certificateAuthorityId

The ID of the certificate authority to describe.

Required: Yes

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

{
   "certificateAuthority": {
      "activatedAt": number,
      "activatedBy": "string",
      "createdAt": number,
```

```
      "createdBy": "string",
      "data": "string",
      "distributionStatus": "string",
      "id": "string",
      "rollbackAvailable": boolean,
      "scheduledEvents": {
         "finalAutoActivation": number,
         "firstAutoActivation": number
      },
      "signingStatus": "string",
      "validity": {
         "notAfter": number,
         "notBefore": number
      }
   }
}
```

Response Elements

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

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

certificateAuthority

An object containing detailed information about the certificate authority.

Type: CertificateAuthority object

Errors

For information about the errors that are common to all actions, see Common Errors.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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 certificate authority with the ID `b2c3d4e5-6789-0abc-def0-1234567890ab` for the cluster named `my-cluster`.

Sample Request

```
GET /clusters/my-cluster/certificate-authorities/b2c3d4e5-6789-0abc-def0-1234567890ab
 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-certificate-authority
X-Amz-Date: 20260729T193227Z
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 29 Jul 2026 19:32:43 GMT
Content-Type: application/json
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
```

```
Connection: keep-alive

{
 "certificateAuthority": {
  "id": "b2c3d4e5-6789-0abc-def0-1234567890ab",
  "createdAt": 1785312515.848,
  "createdBy": "CUSTOMER",
  "signingStatus": "NOT_USED",
  "distributionStatus": "COMPLETE",
  "validity": {
   "notBefore": 1785312515.848,
   "notAfter": 1816848515.848
  },
  "scheduledEvents": {
   "firstAutoActivation": 1801080515.848,
   "finalAutoActivation": 1812960515.848
  },
  "rollbackAvailable": false,
  "data": "LS0tLS1CRUdJTiBDRVJUSUZJQ0FURS0tLS0t...LS0tLS1FTkQgQ0VSVElGSUNBVEUtLS0tLQ=="
 }
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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": {
      "active": {
         "activatedBy": "string",
         "id": "string"
      },
      "data": "string"
   },
   "clientRequestToken": "string",
   "computeConfig": {
      "enabled": boolean,
      "nodePools": [ "string" ],
      "nodeRoleArn": "string"
   },
   "connectorConfig": {
      "activationCode": "string",
      "activationExpiry": number,
      "activationId": "string",
      "provider": "string",
      "roleArn": "string"
   },
   "controlPlaneScalingConfig": {
      "tier": "string"
   },
   "createdAt": number,
   "deletionProtection": boolean,
   "encryptionConfig": [
      {
         "provider": {
            "keyArn": "string"
         },
         "resources": [ "string" ]
      }
   ],
   "endpoint": "string",
   "health": {
      "issues": [
         {
            "code": "string",
            "message": "string",
            "resourceIds": [ "string" ]
```

```
            }
         ]
      },
      "id": "string",
      "identity": {
         "oidc": {
            "issuer": "string"
         }
      },
      "kubeApiServerConfig": {
         "eventTtl": "string",
         "serviceNodePortRange": {
            "maxPort": number,
            "minPort": number
         }
      },
      "kubeControllerManagerConfig": {
         "horizontalPodAutoscalerControllerConfig": {
            "horizontalPodAutoscalerSyncPeriod": "string"
         },
         "podGcControllerConfig": {
            "terminatedPodGcThreshold": number
         }
      },
      "kubernetesNetworkConfig": {
         "elasticLoadBalancing": {
            "enabled": boolean,
            "gatewayApi": {
               "crds": {
                  "managed": boolean
               }
            }
         },
         "ipFamily": "string",
         "serviceIpv4Cidr": "string",
         "serviceIpv6Cidr": "string"
      },
      "kubeSchedulerConfig": {
         "nodeResourcesFit": {
            "scoringStrategy": {
               "resources": [
                  {
                     "name": "string",
                     "weight": number
```

```
                }
            ],
            "type": "string"
         }
      }
   },
   "logging": {
      "clusterLogging": [
         {
            "enabled": boolean,
            "types": [ "string" ]
         }
      ]
   },
   "name": "string",
   "outpostConfig": {
      "controlPlaneInstanceType": "string",
      "controlPlanePlacement": {
         "groupName": "string",
         "spreadLevel": "string"
      },
      "etcdInstanceType": "string",
      "etcdPlacement": {
         "spreadLevel": "string"
      },
      "outpostArns": [ "string" ]
   },
   "platformVersion": "string",
   "remoteNetworkConfig": {
      "remoteNodeNetworks": [
         {
            "cidrs": [ "string" ]
         }
      ],
      "remotePodNetworks": [
         {
            "cidrs": [ "string" ]
         }
      ]
   },
   "resourcesVpcConfig": {
      "clusterSecurityGroupId": "string",
      "controlPlaneEgressMode": "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: W85cPGkVvHcFa4g=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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-xxxxxxxxxxxxxxxx",
                "subnet-yyyyyyyyyyyyyyyy",
                "subnet-zzzzzzzzzzzzzzzz"
            ],
            "securityGroupIds": [
                "sg-xxxxxxxxxxxxxxxx"
            ],
            "vpcId": "vpc-xxxxxxxxxxxxxxxx",
            "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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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=incl
 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": [
      {
         "clusterType": "string",
         "clusterVersion": "string",
         "controlPlaneComponentConfig": {
            "kubeApiServerConfig": {
               "eventTtl": {
                  "constraints": {
                     "max": "string",
                     "min": "string"
                  },
                  "defaultValue": "string"
               },
               "serviceNodePortRange": {
                  "constraints": {
```

```
                  "maxPort": {
                     "max": number,
                     "min": number
                  },
                  "minPort": {
                     "max": number,
                     "min": number
                  }
               },
               "defaultValue": {
                  "maxPort": number,
                  "minPort": number
               }
            }
         },
         "kubeControllerManagerConfig": {
            "horizontalPodAutoscalerControllerConfig": {
               "horizontalPodAutoscalerSyncPeriod": {
                  "constraints": {
                     "max": "string",
                     "min": "string"
                  },
                  "defaultValue": "string"
               }
            },
            "podGcControllerConfig": {
               "terminatedPodGcThreshold": {
                  "constraints": {
                     "max": number,
                     "min": number
                  },
                  "defaultValue": number
               }
            }
         },
         "kubeSchedulerConfig": {
            "nodeResourcesFit": {
               "scoringStrategy": {
                  "constraints": {
                     "resources": {
                        "name": {
                           "allowedValues": [ "string" ]
                        },
                        "weight": {
```

```
                        "max": number,
                        "min": number
                     }
                  },
                  "scoringStrategy": {
                     "allowedValues": [ "string" ]
                  }
               },
               "defaultValue": {
                  "resources": [
                     {
                        "name": "string",
                        "weight": number
                     }
                  ],
                  "type": "string"
               }
            }
         }
      }
   },
   "controlPlaneScalingTiers": [
      {
         "apiRequestConcurrency": number,
         "clusterDatabaseSizeGb": number,
         "controlPlaneComponentConfigOverrides": {
            "kubeApiServerConfig": {
               "eventTtl": {
                  "constraints": {
                     "max": "string",
                     "min": "string"
                  },
                  "defaultValue": "string"
               },
               "serviceNodePortRange": {
                  "constraints": {
                     "maxPort": {
                        "max": number,
                        "min": number
                     },
                     "minPort": {
                        "max": number,
                        "min": number
                     }
```

```
            },
            "defaultValue": {
               "maxPort": number,
               "minPort": number
            }
         }
      },
      "kubeControllerManagerConfig": {
         "horizontalPodAutoscalerControllerConfig": {
            "horizontalPodAutoscalerSyncPeriod": {
               "constraints": {
                  "max": "string",
                  "min": "string"
               },
               "defaultValue": "string"
            }
         },
         "podGcControllerConfig": {
            "terminatedPodGcThreshold": {
               "constraints": {
                  "max": number,
                  "min": number
               },
               "defaultValue": number
            }
         }
      },
      "kubeSchedulerConfig": {
         "nodeResourcesFit": {
            "scoringStrategy": {
               "constraints": {
                  "resources": {
                     "name": {
                        "allowedValues": [ "string" ]
                     },
                     "weight": {
                        "max": number,
                        "min": number
                     }
                  },
                  "scoringStrategy": {
                     "allowedValues": [ "string" ]
                  }
               },
```

```
                        "defaultValue": {
                           "resources": [
                              {
                                 "name": "string",
                                 "weight": number
                              }
                           ],
                           "type": "string"
                        }
                     }
                  }
               }
            },
            "podSchedulingRatePerSecond": number,
            "tierName": "string"
         }
      ],
      "defaultPlatformVersion": "string",
      "defaultVersion": boolean,
      "endOfExtendedSupportDate": number,
      "endOfStandardSupportDate": number,
      "kubernetesPatchVersion": "string",
      "releaseDate": number,
      "status": "string",
      "versionStatus": "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.

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.

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

DescribeFargateProfile

Service: Amazon Elastic Kubernetes Service

Describes an AWS 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": {
      "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 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: DebFwF0YPHcFkog=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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-xxxxxxxxxxxxxxxx",
      "subnet-yyyyyyyyyyyyyyyy"
    ],
    "selectors": [
      {
        "namespace": "default",
        "labels": {
          "infrastructure": "fargate"
        }
      }
    ],
    "status": "ACTIVE",
    "tags": {}
  }
}
```

See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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

{
   "identityProviderConfig": {
      "name": "string",
      "type": "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.

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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS 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": {
      "additionalInfo": {
         "string" : "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.

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

DescribeInsightsRefresh

Service: Amazon Elastic Kubernetes Service

Returns the status of the latest on-demand cluster insights refresh operation.

Request Syntax

```
GET /clusters/name/insights-refresh HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of the cluster associated with the insights refresh operation.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "endedAt": number,
   "message": "string",
   "startedAt": number,
   "status": "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.

endedAt

The date and time when the insights refresh operation ended.

Type: Timestamp

message

The message associated with the insights refresh operation.

Type: String

startedAt

The date and time when the insights refresh operation started.

Type: Timestamp

status

The current status of the insights refresh operation.

Type: String

Valid Values: `IN_PROGRESS | FAILED | COMPLETED`

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.

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

Example of refresh in progress

The following example shows when the cluster insights refresh workflow is in progress.

Sample Request

```
GET /clusters/name/insights-refresh HTTP/1.1
```

Sample Response

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

{
    "message": "Cluster insights refresh is in progress.",
    "status": "IN_PROGRESS",
    "startedAt": "2025-08-19T13:45:11-07:00"
}
```

Example of refresh completion

The following example shows when the cluster insights refresh workflow completed successfully.

Sample Request

```
GET /clusters/name/insights-refresh HTTP/1.1
```

Sample Response

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

{
    "message": "Cluster insights refresh has completed successfully.",
    "status": "COMPLETED",
    "startedAt": "2025-08-19T13:45:11-07:00",
    "endedAt": "2025-08-19T13:45:50-07:00"
```

```
}
```

Example of refresh error

The following example shows when the cluster insights refresh workflow encountered an error.

Sample Request

```
GET /clusters/name/insights-refresh HTTP/1.1
```

Sample Response

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

{
    "message": "The latest cluster insights refresh encountered an error. Try
 StartInsightsRefresh again.",
    "status": "FAILED",
    "startedAt": "2025-08-19T13:45:11-07:00",
    "endedAt": "2025-08-19T13:45:50-07:00"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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,
         "maxParallelNodesRepairedCount": number,
         "maxParallelNodesRepairedPercentage": number,
         "maxUnhealthyNodeThresholdCount": number,
         "maxUnhealthyNodeThresholdPercentage": number,
         "nodeRepairConfigOverrides": [
            {
               "minRepairWaitTimeMins": number,
               "nodeMonitoringCondition": "string",
               "nodeUnhealthyReason": "string",
               "repairAction": "string"
            }
         ]
      },
      "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",
      "warmPoolConfig": {
         "enabled": boolean,
         "maxGroupPreparedCapacity": number,
         "minSize": number,
         "poolState": "string",
         "reuseOnScaleIn": 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.

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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to

AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: DAdikHT3vHcFz3w=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "nodegroup": {
    "nodegroupName": "standard",
    "nodegroupArn": "arn:aws:eks:us-west-2:012345678910:nodegroup/my-cluster/standard/
xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx",
    "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-yyyyyyyyyyyyyyyy",
      "subnet-zzzzzzzzzzzzzzzz"
    ],
    "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-xxxxxxxxxxxxxxxx"
    },
    "diskSize": 20,
    "health": {
      "issues": []
    },
    "tags": {}
  }
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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 `CreatePodIdentityAssocation` 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": "string",
      "associationId": "string",
      "clusterName": "string",
      "createdAt": number,
      "disableSessionTags": boolean,
      "externalId": "string",
      "modifiedAt": number,
      "namespace": "string",
      "ownerArn": "string",
      "policy": "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.

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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&capabilityName=capabilityName&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.

capabilityName

The name of the capability for which you want to describe updates.

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": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: RIo-oFsVvHcFXng=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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%3A%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-xxxxxxxxxxx
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-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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

{
   "clientRequestToken": "string",
   "identityProviderConfig": {
      "name": "string",
      "type": "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

identityProviderConfig

An object representing an identity provider configuration.

Type: IdentityProviderConfig object

Required: Yes

Response Syntax

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

{
   "update": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ThrottlingException

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

clusterName

The Amazon EKS cluster associated with the exception.

HTTP Status Code: 429

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: XnM1dE8TvHcFn8Q=
```

```
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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

{
   "accessEntries": [ "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.

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.

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
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-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
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-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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

{
   "addons": [ "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

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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: WkYq8HCuvHcFU3Q=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

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

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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": [
      {
         "accessScope": {
            "namespaces": [ "string" ],
            "type": "string"
         },
         "associatedAt": number,
         "modifiedAt": number,
         "policyArn": "string"
      }
   ],
   "clusterName": "string",
   "nextToken": "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.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
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-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

ListCapabilities

Service: Amazon Elastic Kubernetes Service

Lists all managed capabilities in your Amazon EKS cluster. You can use this operation to get an overview of all capabilities and their current status.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

name

The name of the Amazon EKS cluster for which you want to list capabilities.

Required: Yes

maxResults

The maximum number of results to return in a single call. To retrieve the remaining results, make another call with the returned `nextToken` value. If you don't specify a value, the default is 100 results.

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.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "capabilities": [
      {
         "arn": "string",
         "capabilityName": "string",
         "createdAt": number,
         "modifiedAt": number,
         "status": "string",
         "type": "string",
         "version": "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.

capabilities

A list of capability summary objects, each containing basic information about a capability including its name, ARN, type, status, version, and timestamps.

Type: Array of CapabilitySummary objects

nextToken

The `nextToken` value to include in a future `ListCapabilities` request. When the results of a `ListCapabilities` 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.

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

ListCertificateAuthorities

Service: Amazon Elastic Kubernetes Service

Lists the certificate authorities (CAs) for your cluster. A cluster has at most two certificate authorities: the outgoing CA that's currently signing and, during a rotation, one successor CA.

Request Syntax

```
GET /clusters/name/certificate-authorities?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 to return in a single call. To retrieve the remaining results, make another call with the returned `nextToken` value. If you don't specify a value, the default is 100 results.

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

{
   "certificateAuthorities": [
      {
         "activatedAt": number,
         "activatedBy": "string",
         "createdAt": number,
         "createdBy": "string",
         "distributionStatus": "string",
         "id": "string",
         "signingStatus": "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.

certificateAuthorities

A list of certificate authority summary objects, each containing basic information about a certificate authority, including its ID, signing status, and distribution status.

Type: Array of CertificateAuthoritySummary objects

nextToken

The `nextToken` value to include in a future `ListCertificateAuthorities` request. When the results of a `ListCertificateAuthorities` 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.

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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 certificate authorities for the cluster named `my-cluster`.

Sample Request

```
GET /clusters/my-cluster/certificate-authorities 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-certificate-authorities
X-Amz-Date: 20260729T193227Z
```

```
Authorization: AUTHPARAMS
```

Sample Response

```
HTTP/1.1 200 OK
Date: Wed, 29 Jul 2026 19:32:43 GMT
Content-Type: application/json
x-amzn-RequestId: xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
 "certificateAuthorities": [
  {
   "id": "a1b2c3d4-5678-90ab-cdef-1234567890ab",
   "createdAt": 1760284672.451,
   "createdBy": "EKS",
   "activatedAt": 1760284672.451,
   "activatedBy": "EKS",
   "signingStatus": "IN_USE",
   "distributionStatus": "COMPLETE"
  },
  {
   "id": "b2c3d4e5-6789-0abc-def0-1234567890ab",
   "createdAt": 1785312515.848,
   "createdBy": "CUSTOMER",
   "signingStatus": "NOT_USED",
   "distributionStatus": "COMPLETE"
  }
 ]
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

ListClusters

Service: Amazon Elastic Kubernetes Service

Lists the Amazon EKS clusters in your AWS account in the specified AWS 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.aws.amazon.com/eks/latest/userguide/eks-connector.htmlconnected 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

{
   "clusters": [ "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.

clusters

A list of all of the clusters for your account in the specified AWS 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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 AWS 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-xxxxxxxxxxx
x-amz-apigw-id: HxkiCF8EPHcF4nw=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "clusters": [
    "my-cluster",
```

```
    "prod"
  ],
  "nextToken": null
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

ListFargateProfiles

Service: Amazon Elastic Kubernetes Service

Lists the AWS Fargate profiles associated with the specified cluster in your AWS account in the specified AWS 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: DeeMiFxHvHcFd3g=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: XnGqaHs7vHcFb1g=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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

{
   "filter": {
      "categories": [ "string" ],
      "kubernetesVersions": [ "string" ],
      "statuses": [ "string" ]
   },
   "maxResults": number,
   "nextToken": "string"
}
```

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.

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

ListNodegroups

Service: Amazon Elastic Kubernetes Service

Lists the managed node groups associated with the specified cluster in your AWS account in the specified AWS 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: DAeUrHtPPHcFU_A=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
  "nodegroups": [
    "gpu",
    "standard"
  ],
  "nextToken": null
}
```

See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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.

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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.

message

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.

message

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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

ListUpdates

Service: Amazon Elastic Kubernetes Service

Lists the updates associated with an Amazon EKS resource in your AWS account, in the specified AWS Region.

Request Syntax

```
GET /clusters/name/updates?
addonName=addonName&capabilityName=capabilityName&maxResults=maxResults&nextToken=nextToken&nod
 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.

capabilityName

The name of the capability for which you want to list 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

{
   "nextToken": "string",
   "updateIds": [ "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

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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to

AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: RIo6pF2NPHcF5PQ=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++

- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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 AWS 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 AWS 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": {
         "active": {
            "activatedBy": "string",
            "id": "string"
         },
         "data": "string"
      },
      "clientRequestToken": "string",
      "computeConfig": {
         "enabled": boolean,
         "nodePools": [ "string" ],
         "nodeRoleArn": "string"
      },
      "connectorConfig": {
         "activationCode": "string",
         "activationExpiry": number,
         "activationId": "string",
         "provider": "string",
         "roleArn": "string"
      },
      "controlPlaneScalingConfig": {
         "tier": "string"
      },
      "createdAt": number,
      "deletionProtection": boolean,
      "encryptionConfig": [
         {
            "provider": {
               "keyArn": "string"
            },
            "resources": [ "string" ]
```

```
            }
         ],
         "endpoint": "string",
         "health": {
            "issues": [
               {
                  "code": "string",
                  "message": "string",
                  "resourceIds": [ "string" ]
               }
            ]
         },
         "id": "string",
         "identity": {
            "oidc": {
               "issuer": "string"
            }
         },
         "kubeApiServerConfig": {
            "eventTtl": "string",
            "serviceNodePortRange": {
               "maxPort": number,
               "minPort": number
            }
         },
         "kubeControllerManagerConfig": {
            "horizontalPodAutoscalerControllerConfig": {
               "horizontalPodAutoscalerSyncPeriod": "string"
            },
            "podGcControllerConfig": {
               "terminatedPodGcThreshold": number
            }
         },
         "kubernetesNetworkConfig": {
            "elasticLoadBalancing": {
               "enabled": boolean,
               "gatewayApi": {
                  "crds": {
                     "managed": boolean
                  }
               }
            },
            "ipFamily": "string",
            "serviceIpv4Cidr": "string",
```

```
      "serviceIpv6Cidr": "string"
   },
   "kubeSchedulerConfig": {
      "nodeResourcesFit": {
         "scoringStrategy": {
            "resources": [
               {
                  "name": "string",
                  "weight": number
               }
            ],
            "type": "string"
         }
      }
   },
   "logging": {
      "clusterLogging": [
         {
            "enabled": boolean,
            "types": [ "string" ]
         }
      ]
   },
   "name": "string",
   "outpostConfig": {
      "controlPlaneInstanceType": "string",
      "controlPlanePlacement": {
         "groupName": "string",
         "spreadLevel": "string"
      },
      "etcdInstanceType": "string",
      "etcdPlacement": {
         "spreadLevel": "string"
      },
      "outpostArns": [ "string" ]
   },
   "platformVersion": "string",
   "remoteNetworkConfig": {
      "remoteNodeNetworks": [
         {
            "cidrs": [ "string" ]
         }
      ],
      "remotePodNetworks": [
```

```
            {
               "cidrs": [ "string" ]
            }
         ]
      },
      "resourcesVpcConfig": {
         "clusterSecurityGroupId": "string",
         "controlPlaneEgressMode": "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*.

message

You do not have sufficient access to perform this action.

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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

HTTP Status Code: 409

ResourceLimitExceededException

You have encountered a service limit on the specified resource.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourcePropagationDelayException

Required resources (such as service-linked roles) were created and are still propagating. Retry later.

message

Required resources (such as service-linked roles) were created and are still propagating. Retry later.

HTTP Status Code: 428

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ServiceUnavailableException

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

message

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

HTTP Status Code: 503

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

StartInsightsRefresh

Service: Amazon Elastic Kubernetes Service

Initiates an on-demand refresh operation for cluster insights, getting the latest analysis outside of the standard refresh schedule.

Request Syntax

```
POST /clusters/name/insights-refresh HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

name

The name of the cluster for the refresh insights operation.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "message": "string",
   "status": "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.

message

The message associated with the insights refresh operation.

Type: String

status

The current status of the insights refresh operation.

Type: String

Valid Values: `IN_PROGRESS | FAILED | COMPLETED`

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.

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

Example

The following example starts the cluster insights generation process.

Sample Request

```
POST /clusters/name/insights-refresh HTTP/1.1
```

Sample Response

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

{
    "message": "Initiated cluster insights refresh.",
    "status": "IN_PROGRESS"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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 AWS 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.

message

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.

message

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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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.

message

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.

message

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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3

- AWS SDK for Python (Boto3)
- AWS 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": "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

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.

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
```

```
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-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)

- AWS 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

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

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": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: WkZ_KGiBvHcFhtw=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
Connection: keep-alive

{
 "update": {
  "id": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxx",
  "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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

UpdateCapability

Service: Amazon Elastic Kubernetes Service

Updates the configuration of a managed capability in your Amazon EKS cluster. You can update the IAM role, configuration settings, and delete propagation policy for a capability.

When you update a capability, Amazon EKS applies the changes and may restart capability components as needed. The capability remains available during the update process, but some operations may be temporarily unavailable.

Request Syntax

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

{
   "clientRequestToken": "string",
   "configuration": {
      "ack": {
         "disabledServices": [ "string" ],
         "enableCrossNamespace": boolean
      },
      "argoCd": {
         "networkAccess": {
            "vpceIds": [ "string" ]
         },
         "rbacRoleMappings": {
            "addOrUpdateRoleMappings": [
               {
                  "identities": [
                     {
                        "id": "string",
                        "type": "string"
                     }
                  ],
                  "role": "string"
               }
            ],
            "removeRoleMappings": [
               {
                  "identities": [
                     {
                        "id": "string",
```

```
                        "type": "string"
                    }
                ],
                "role": "string"
            }
        ]
    }
  }
 },
 "deletePropagationPolicy": "string",
 "roleArn": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

capabilityName

The name of the capability to update configuration for.

Required: Yes

name

The name of the Amazon EKS cluster that contains the capability you want to update configuration for.

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. This token is valid for 24 hours after creation.

Type: String

Required: No

configuration

The updated configuration settings for the capability. You only need to specify the configuration parameters you want to change. For Argo CD capabilities, you can update RBAC role mappings and network access settings.

Type: UpdateCapabilityConfiguration object

Required: No

deletePropagationPolicy

The updated delete propagation policy for the capability. Currently, the only supported value is `RETAIN`.

Type: String

Valid Values: `RETAIN`

Required: No

roleArn

The Amazon Resource Name (ARN) of the IAM role that the capability uses to interact with AWS services. If you specify a new role ARN, the capability will start using the new role for all subsequent operations.

Type: String

Required: No

Response Syntax

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

{
   "update": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

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*.

message

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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.aws.amazon.com/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, AWS 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

{
   "accessConfig": {
      "authenticationMode": "string"
   },
   "clientRequestToken": "string",
   "computeConfig": {
      "enabled": boolean,
      "nodePools": [ "string" ],
      "nodeRoleArn": "string"
   },
   "controlPlaneScalingConfig": {
      "tier": "string"
   },
   "deletionProtection": boolean,
   "kubeApiServerConfig": {
      "eventTtl": "string",
      "serviceNodePortRange": {
         "maxPort": number,
         "minPort": number
      }
   },
   "kubeControllerManagerConfig": {
      "horizontalPodAutoscalerControllerConfig": {
         "horizontalPodAutoscalerSyncPeriod": "string"
      },
      "podGcControllerConfig": {
         "terminatedPodGcThreshold": number
      }
   },
   "kubernetesNetworkConfig": {
      "elasticLoadBalancing": {
         "enabled": boolean,
         "gatewayApi": {
            "crds": {
```

```
            "managed": boolean
         }
      }
   },
   "ipFamily": "string",
   "serviceIpv4Cidr": "string"
},
"kubeSchedulerConfig": {
   "nodeResourcesFit": {
      "scoringStrategy": {
         "resources": [
            {
               "name": "string",
               "weight": number
            }
         ],
         "type": "string"
      }
   }
},
"logging": {
   "clusterLogging": [
      {
         "enabled": boolean,
         "types": [ "string" ]
      }
   ]
},
"remoteNetworkConfig": {
   "remoteNodeNetworks": [
      {
         "cidrs": [ "string" ]
      }
   ],
   "remotePodNetworks": [
      {
         "cidrs": [ "string" ]
      }
   ]
},
"resourcesVpcConfig": {
   "controlPlaneEgressMode": "string",
   "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

controlPlaneScalingConfig

The control plane scaling tier configuration. For more information, see EKS Provisioned Control Plane in the Amazon EKS User Guide.

Type: ControlPlaneScalingConfig object

Required: No

deletionProtection

Specifies whether to enable or disable deletion protection for the cluster. When enabled (`true`), the cluster cannot be deleted until deletion protection is explicitly disabled. When disabled (`false`), the cluster can be deleted normally.

Type: Boolean

Required: No

kubeApiServerConfig

The Kubernetes API server configuration for the updated cluster.

Type: KubeApiServerConfigRequest object

Required: No

kubeControllerManagerConfig

The Kubernetes controller manager configuration for the updated cluster.

Type: KubeControllerManagerConfigRequest object

Required: No

kubernetesNetworkConfig

The Kubernetes network configuration for the cluster.

Type: KubernetesNetworkConfigRequest object

Required: No

kubeSchedulerConfig

The Kubernetes scheduler configuration for the updated cluster.

Type: KubeSchedulerConfigRequest 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 the cluster update. You can use this parameter to update the control plane egress mode, the subnets used by the cluster, the security groups, and the endpoint access settings.

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, AWS 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 AWS 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": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ThrottlingException

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

clusterName

The Amazon EKS cluster associated with the exception.

HTTP Status Code: 429

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to

AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: V1LanEMJPHcFvTg=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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-xxxxxxxxxxx
x-amz-apigw-id: W87Q5HlCvHcFxDA=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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

{
   "clientRequestToken": "string",
   "force": boolean,
   "rollbackConfig": {
      "timeoutMinutes": number
   },
   "version": "string"
}
```

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 or rollback-blocking readiness checks when updating a cluster.

Type: Boolean

Required: No

rollbackConfig

The rollback configuration for the cluster version rollback.

Type: RollbackConfig object

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": {
      "cancellation": {
         "reason": "string",
```

```
         "status": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

clusterName

The Amazon EKS cluster associated with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

ThrottlingException

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

clusterName

The Amazon EKS cluster associated with the exception.

HTTP Status Code: 429

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: RIo2bEs8vHcFXoA=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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

{
   "clientRequestToken": "string",
   "labels": {
      "addOrUpdateLabels": {
         "string" : "string"
      },
      "removeLabels": [ "string" ]
   },
   "nodeRepairConfig": {
      "enabled": boolean,
      "maxParallelNodesRepairedCount": number,
      "maxParallelNodesRepairedPercentage": number,
      "maxUnhealthyNodeThresholdCount": number,
      "maxUnhealthyNodeThresholdPercentage": number,
      "nodeRepairConfigOverrides": [
         {
            "minRepairWaitTimeMins": number,
            "nodeMonitoringCondition": "string",
            "nodeUnhealthyReason": "string",
            "repairAction": "string"
         }
      ]
   },
   "scalingConfig": {
      "desiredSize": number,
      "maxSize": number,
      "minSize": number
   },
```

```
   "taints": {
      "addOrUpdateTaints": [
         {
            "effect": "string",
            "key": "string",
            "value": "string"
         }
      ],
      "removeTaints": [
         {
            "effect": "string",
            "key": "string",
            "value": "string"
         }
      ]
   },
   "updateConfig": {
      "maxUnavailable": number,
      "maxUnavailablePercentage": number,
      "updateStrategy": "string"
   },
   "warmPoolConfig": {
      "enabled": boolean,
      "maxGroupPreparedCapacity": number,
      "minSize": number,
      "poolState": "string",
      "reuseOnScaleIn": boolean
   }
}
```

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

warmPoolConfig

The warm pool configuration to apply to the node group. You can use this to add a warm pool to an existing node group or modify the settings of an existing warm pool.

Type: WarmPoolConfig object

Required: No

Response Syntax

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

{
   "update": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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-xxxxxxxxxxx
x-amz-apigw-id: DAt5dGkFPHcFzuQ=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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

{
   "clientRequestToken": "string",
   "force": boolean,
   "launchTemplate": {
      "id": "string",
      "name": "string",
```

```
      "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 node group will be updated to match the cluster's current Kubernetes version, and the latest available AMI for that version will be used. You can also 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": {
      "cancellation": {
         "reason": "string",
         "status": "string"
      },
      "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.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

InvalidParameterException

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

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

addonName

The specified add-on name is in use.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

Examples

In the following example or examples, the Authorization header contents (`AUTHPARAMS`) must be replaced with an AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
x-amz-apigw-id: DAeuxEBkvHcF1sg=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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-xxxxxxxxxxx
x-amz-apigw-id: DAeuxEBkvHcF1sg=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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 AWS 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 AWS account.

Request Syntax

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

{
   "clientRequestToken": "string",
   "disableSessionTags": boolean,
   "policy": "string",
   "roleArn": "string",
   "targetRoleArn": "string"
}
```

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 AWS 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*.

AWS 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

policy

An optional IAM policy in JSON format (as an escaped string) that applies additional restrictions to this pod identity association beyond the IAM policies attached to the IAM role. This policy

is applied as the intersection of the role's policies and this policy, allowing you to reduce the permissions that applications in the pods can use. Use this policy to enforce least privilege access while still leveraging a shared IAM role across multiple applications.

Important considerations

- **Session tags:** When using this policy, `disableSessionTags` must be set to `true`.
- **Target role permissions:** If you specify both a `TargetRoleArn` and a policy, the policy restrictions apply only to the target role's permissions, not to the initial role used for assuming the target role.

Type: String

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 AWS resources from a different role that exists in the same or different AWS 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 AWS 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",
      "policy": "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 association that was updated.

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.

addonName

The specified parameter for the add-on name is invalid. Review the available parameters for the API request

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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.

addonName

The request is invalid given the state of the add-on name. Check the state of the cluster and the associated operations.

clusterName

The Amazon EKS cluster associated with the exception.

message

The Amazon EKS add-on name associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

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 AWS Region specific.

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

fargateProfileName

The Fargate profile associated with the exception.

message

The Amazon EKS message associated with the exception.

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 404

ServerException

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

addonName

The Amazon EKS add-on name associated with the exception.

clusterName

The Amazon EKS cluster associated with the exception.

message

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

nodegroupName

The Amazon EKS managed node group associated with the exception.

subscriptionId

The Amazon EKS subscription ID with the exception.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS 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 AWS SDKs to connect to AWS 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

{
   "token": "string"
}
```

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

{
   "assumedRoleUser": {
      "arn": "string",
      "assumeRoleId": "string"
   },
   "audience": "string",
   "credentials": {
      "accessKeyId": "string",
      "expiration": number,
      "secretAccessKey": "string",
      "sessionToken": "string"
   },
   "podIdentityAssociation": {
      "associationArn": "string",
      "associationId": "string"
   },
   "subject": {
      "namespace": "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.

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 AWS 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-`*`clustername-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 *AWS 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 AWS 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 AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, 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-xxxxxxxxxxx
```

```
x-amz-apigw-id: W84GUEIbPHcFW2Q=
X-Amzn-Trace-Id: Root=1-xxxxxxxxx-xxxxxxxxxxxxxxxxxxxxxxx
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 AWS SDKs, see the following:

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

- AWS SDK for PHP V3
- AWS SDK for Python (Boto3)
- AWS SDK for Ruby V3

Data Types

The following data types are supported by Amazon Elastic Kubernetes Service:

- AccessConfigResponse
- AccessEntry
- AccessPolicy
- AccessScope
- AckConfigRequest
- AckConfigResponse
- ActiveCertificateAuthority
- Addon
- AddonCompatibilityDetail
- AddonHealth
- AddonInfo
- AddonIssue
- AddonNamespaceConfigRequest
- AddonNamespaceConfigResponse
- AddonPodIdentityAssociations
- AddonPodIdentityConfiguration
- AddonVersionInfo
- AllowedValuesConstraint
- ArgoCdAwsIdcConfigRequest
- ArgoCdAwsIdcConfigResponse
- ArgoCdConfigRequest
- ArgoCdConfigResponse
- ArgoCdNetworkAccessConfigRequest
- ArgoCdNetworkAccessConfigResponse
- ArgoCdRoleMapping
- AssociatedAccessPolicy
- AutoScalingGroup

- BlockStorage
- Cancellation
- Capability
- CapabilityConfigurationRequest
- CapabilityConfigurationResponse
- CapabilityHealth
- CapabilityIssue
- CapabilitySummary
- Certificate
- CertificateAuthority
- CertificateAuthorityScheduledEvents
- CertificateAuthoritySummary
- CertificateAuthorityValidity
- ClientStat
- Cluster
- ClusterHealth
- ClusterIssue
- ClusterVersionInformation
- Compatibility
- ComputeConfigRequest
- ComputeConfigResponse
- ConnectorConfigRequest
- ConnectorConfigResponse
- ControlPlaneConfigInfo
- ControlPlanePlacementRequest
- ControlPlanePlacementResponse
- ControlPlaneScalingConfig
- ControlPlaneScalingTierInfo
- CrdManagementConfiguration
- CreateAccessConfigRequest

- DeprecationDetail
- DurationConstraints
- DurationParameterConfig
- EksAnywhereSubscription
- EksAnywhereSubscriptionTerm
- ElasticLoadBalancing
- EncryptionConfig
- ErrorDetail
- EtcdPlacementRequest
- EtcdPlacementResponse
- FargateProfile
- FargateProfileHealth
- FargateProfileIssue
- FargateProfileSelector
- GatewayApiConfiguration
- HorizontalPodAutoscalerControllerConfigRequest
- HorizontalPodAutoscalerControllerConfigResponse
- HorizontalPodAutoscalerControllerVersionConfig
- Identity
- IdentityProviderConfig
- IdentityProviderConfigResponse
- Insight
- InsightCategorySpecificSummary
- InsightResourceDetail
- InsightsFilter
- InsightStatus
- InsightSummary
- IntegerConstraints
- IntegerParameterConfig
- IntegerRangeConstraint

- Issue
- KubeApiServerConfigRequest
- KubeApiServerConfigResponse
- KubeApiServerVersionConfig
- KubeControllerManagerConfigRequest
- KubeControllerManagerConfigResponse
- KubeControllerManagerVersionConfig
- KubernetesNetworkConfigRequest
- KubernetesNetworkConfigResponse
- KubeSchedulerConfigRequest
- KubeSchedulerConfigResponse
- KubeSchedulerVersionConfig
- LaunchTemplateSpecification
- License
- Logging
- LogSetup
- MarketplaceInformation
- Nodegroup
- NodegroupHealth
- NodegroupResources
- NodegroupScalingConfig
- NodegroupUpdateConfig
- NodeRepairConfig
- NodeRepairConfigOverrides
- NodeResourcesFitConfig
- NodeResourcesFitVersionConfig
- OIDC
- OidcIdentityProviderConfig
- OidcIdentityProviderConfigRequest
- OutpostConfigRequest

- OutpostConfigResponse
- PodGcControllerConfigRequest
- PodGcControllerConfigResponse
- PodGcControllerVersionConfig
- PodIdentityAssociation
- PodIdentityAssociationSummary
- PortRangeConstraints
- PortRangeParameterConfig
- Provider
- RemoteAccessConfig
- RemoteNetworkConfigRequest
- RemoteNetworkConfigResponse
- RemoteNodeNetwork
- RemotePodNetwork
- ResourceConstraints
- ResourceWeight
- RollbackConfig
- ScoringStrategy
- ScoringStrategyConfig
- ScoringStrategyConstraints
- ServiceNodePortRange
- SsoIdentity
- StorageConfigRequest
- StorageConfigResponse
- Taint
- Update
- UpdateAccessConfigRequest
- UpdateAckConfig
- UpdateArgoCdConfig
- UpdateCapabilityConfiguration

- UpdateLabelsPayload
- UpdateParam
- UpdateRoleMappings
- UpdateTaintsPayload
- UpgradePolicyRequest
- UpgradePolicyResponse
- VpcConfigRequest
- VpcConfigResponse
- WarmPoolConfig
- 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
- AckConfigRequest
- AckConfigResponse
- ActiveCertificateAuthority
- Addon
- AddonCompatibilityDetail

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- NodegroupUpdateConfig
- NodeRepairConfig
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- NodeResourcesFitVersionConfig
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- OidcIdentityProviderConfig
- OidcIdentityProviderConfigRequest
- OutpostConfigRequest
- OutpostConfigResponse
- PodGcControllerConfigRequest
- PodGcControllerConfigResponse
- PodGcControllerVersionConfig
- PodIdentityAssociation
- PodIdentityAssociationSummary
- PortRangeConstraints
- PortRangeParameterConfig
- Provider
- RemoteAccessConfig
- RemoteNetworkConfigRequest
- RemoteNetworkConfigResponse

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- RemotePodNetwork
- ResourceConstraints
- ResourceWeight
- RollbackConfig
- ScoringStrategy
- ScoringStrategyConfig
- ScoringStrategyConstraints
- ServiceNodePortRange
- SsoIdentity
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- StorageConfigResponse
- Taint
- Update
- UpdateAccessConfigRequest
- UpdateAckConfig
- UpdateArgoCdConfig
- UpdateCapabilityConfiguration
- UpdateLabelsPayload
- UpdateParam
- UpdateRoleMappings
- UpdateTaintsPayload
- UpgradePolicyRequest
- UpgradePolicyResponse
- VpcConfigRequest
- VpcConfigResponse
- WarmPoolConfig
- 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AckConfigRequest

Service: Amazon Elastic Kubernetes Service

Configuration settings for an ACK (AWS Controllers for Kubernetes) capability. This includes whether controllers can resolve cross-namespace resource references and which ACK service controllers are disabled.

Contents

disabledServices

A list of ACK service names whose controllers are turned off for this capability, for example `s3`, `ec2`, and `iam`. Resources of a disabled service aren't reconciled until you re-enable the service. To keep all services enabled, omit this field or specify an empty list. An unrecognized service name is accepted and stored but turns nothing off, and `DescribeCapability` returns the list exactly as you supplied it. For more information, see ACK capability configuration options in the *Amazon EKS User Guide*.

Type: Array of strings

Array Members: Maximum number of 200 items.

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

Pattern: `^[a-z][a-z0-9]*$`

Required: No

enableCrossNamespace

Specifies whether ACK controllers resolve resource references to resources in a different Kubernetes namespace. Set this value to `true` to allow references to resolve to resources in another namespace. If you don't specify this value, or you omit the `ack` configuration entirely, the capability is created with this value set to `false` and references must remain within the same namespace.

Type: Boolean

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AckConfigResponse

Service: Amazon Elastic Kubernetes Service

The response object containing configuration details for an ACK (AWS Controllers for Kubernetes) capability.

Contents

disabledServices

The list of ACK service names whose controllers are turned off for this capability. Existing custom resource definitions remain installed, and resources of a disabled service aren't reconciled until the service is re-enabled.

Type: Array of strings

Array Members: Maximum number of 200 items.

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

Pattern: `^[a-z][a-z0-9]*$`

Required: No

enableCrossNamespace

Indicates whether ACK controllers resolve resource references to resources in a different Kubernetes namespace. This value reflects the setting that's in effect, and is `false` if you never specified a value. Capabilities that were using cross-namespace references before this setting became available have this value set to `true`, so their behavior is unchanged.

Type: Boolean

Required: No

See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

ActiveCertificateAuthority

Service: Amazon Elastic Kubernetes Service

Identifies the certificate authority that is currently signing certificates for the cluster.

Contents

activatedBy

The entity that activated the current signing certificate authority, either `CUSTOMER` or `EKS`.

Type: String

Valid Values: `EKS` | `CUSTOMER`

Required: No

id

The unique identifier of the certificate authority that is currently signing certificates for the cluster.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS Marketplace.

Type: MarketplaceInformation object

Required: No

modifiedAt

The Unix epoch timestamp for the last modification to the object.

Type: Timestamp

Required: No

namespaceConfig

The namespace configuration for the addon. This specifies the Kubernetes namespace where the addon is installed.

Type: AddonNamespaceConfigResponse object

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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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

defaultNamespace

The default Kubernetes namespace where this addon is typically installed if no custom namespace is specified.

Type: String

Required: No

marketplaceInformation

Information about the add-on from the AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

AddonNamespaceConfigRequest

Service: Amazon Elastic Kubernetes Service

The namespace configuration request object for specifying a custom namespace when creating an addon.

Contents

namespace

The name of the Kubernetes namespace to install the addon in. Must be a valid RFC 1123 DNS label.

Type: String

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

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AddonNamespaceConfigResponse

Service: Amazon Elastic Kubernetes Service

The namespace configuration response object containing information about the namespace where an addon is installed.

Contents

namespace

The name of the Kubernetes namespace where the addon is installed.

Type: String

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

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AllowedValuesConstraint

Service: Amazon Elastic Kubernetes Service

A constraint specifying the allowed values for a parameter.

Contents

allowedValues

The list of allowed values.

Type: Array of strings

Array Members: Maximum number of 20 items.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ArgoCdAwsIdcConfigRequest

Service: Amazon Elastic Kubernetes Service

Configuration for integrating Argo CD with IAM Identity CenterIAM; Identity Center. This allows you to use your organization's identity provider for authentication to Argo CD.

Contents

idcInstanceArn

The Amazon Resource Name (ARN) of the IAM Identity CenterIAM; Identity Center instance to use for authentication.

Type: String

Required: Yes

idcRegion

The Region where your IAM Identity CenterIAM; Identity Center instance is located.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ArgoCdAwsIdcConfigResponse

Service: Amazon Elastic Kubernetes Service

The response object containing IAM Identity CenterIAM; Identity Center configuration details for an Argo CD capability.

Contents

idcInstanceArn

The Amazon Resource Name (ARN) of the IAM Identity CenterIAM; Identity Center instance used for authentication.

Type: String

Required: No

idcManagedApplicationArn

The Amazon Resource Name (ARN) of the managed application created in IAM Identity CenterIAM; Identity Center for this Argo CD capability. This application is automatically created and managed by Amazon EKS.

Type: String

Required: No

idcRegion

The Region where the IAM Identity CenterIAM; Identity Center instance is located.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

ArgoCdConfigRequest

Service: Amazon Elastic Kubernetes Service

Configuration settings for an Argo CD capability. This includes the Kubernetes namespace, IAM Identity CenterIAM; Identity Center integration, RBAC role mappings, and network access configuration.

Contents

awsIdc

Configuration for IAM Identity CenterIAM; Identity Center integration. When configured, users can authenticate to Argo CD using their IAM Identity CenterIAM; Identity Center credentials.

Type: ArgoCdAwsIdcConfigRequest object

Required: Yes

endpointPrefix

An optional prefix used to construct the hostname of the Argo CD server endpoint. If not specified, Amazon EKS automatically generates the endpoint. This value can't be changed after the capability is created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 50.

Pattern: `^[a-z0-9]([a-z0-9-]*[a-z0-9])?$`

Required: No

namespace

The Kubernetes namespace where Argo CD resources will be created. If not specified, the default namespace is used.

Type: String

Required: No

networkAccess

Configuration for network access to the Argo CD capability's managed API server endpoint. By default, the Argo CD server is accessible via a public endpoint. You can optionally specify one

or more VPC endpoint IDs to enable private connectivity from your VPCs. When VPC endpoints are configured, public access is blocked and the Argo CD server is only accessible through the specified VPC endpoints.

Type: ArgoCdNetworkAccessConfigRequest object

Required: No

rbacRoleMappings

A list of role mappings that define which IAM Identity CenterIAM; Identity Center users or groups have which Argo CD roles. Each mapping associates an Argo CD role (`ADMIN`, `EDITOR`, or `VIEWER`) with one or more IAM Identity CenterIAM; Identity Center identities.

Type: Array of ArgoCdRoleMapping objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ArgoCdConfigResponse

Service: Amazon Elastic Kubernetes Service

The response object containing Argo CD configuration details, including the server URL that you use to access the Argo CD web interface and API.

Contents

awsIdc

The IAM Identity CenterIAM; Identity Center integration configuration.

Type: ArgoCdAwsIdcConfigResponse object

Required: No

endpointPrefix

The prefix that was configured for the hostname of the Argo CD server endpoint when the capability was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 50.

Pattern: `^[a-z0-9]([a-z0-9-]*[a-z0-9])?$`

Required: No

namespace

The Kubernetes namespace where Argo CD resources are monitored by your Argo CD Capability.

Type: String

Required: No

networkAccess

The network access configuration for the Argo CD capability's managed API server endpoint. If VPC endpoint IDs are specified, public access is blocked and the Argo CD server is only accessible through the specified VPC endpoints.

Type: ArgoCdNetworkAccessConfigResponse object

Required: No

rbacRoleMappings

The list of role mappings that define which IAM Identity CenterIAM; Identity Center users or groups have which Argo CD roles.

Type: Array of ArgoCdRoleMapping objects

Required: No

serverUrl

The URL of the Argo CD server. Use this URL to access the Argo CD web interface and API.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ArgoCdNetworkAccessConfigRequest

Service: Amazon Elastic Kubernetes Service

Configuration for network access to the Argo CD capability's managed API server endpoint. When VPC endpoint IDs are specified, public access is blocked and the Argo CD server is only accessible through the specified VPC endpoints.

Contents

vpceIds

A list of VPC endpoint IDs to associate with the managed Argo CD API server endpoint. Each VPC endpoint provides private connectivity from a specific VPC to the Argo CD server. You can specify multiple VPC endpoint IDs to enable access from multiple VPCs.

Type: Array of strings

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ArgoCdNetworkAccessConfigResponse

Service: Amazon Elastic Kubernetes Service

The response object containing network access configuration for the Argo CD capability's managed API server endpoint. If VPC endpoint IDs are present, public access is blocked and the Argo CD server is only accessible through the specified VPC endpoints.

Contents

vpceIds

The list of VPC endpoint IDs associated with the managed Argo CD API server endpoint. Each VPC endpoint provides private connectivity from a specific VPC to the Argo CD server.

Type: Array of strings

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ArgoCdRoleMapping

Service: Amazon Elastic Kubernetes Service

A mapping between an Argo CD role and IAM Identity CenterIAM; Identity Center identities. This defines which users or groups have specific permissions in Argo CD.

Contents

identities

A list of IAM Identity CenterIAM; Identity Center identities (users or groups) that should be assigned this Argo CD role.

Type: Array of SsoIdentity objects

Required: Yes

role

The Argo CD role to assign. Valid values are:

- `ADMIN` – Full administrative access to Argo CD.
- `EDITOR` – Edit access to Argo CD resources.
- `VIEWER` – Read-only access to Argo CD resources.

Type: String

Valid Values: `ADMIN | EDITOR | VIEWER`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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 AWS account.

Type: Boolean

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Cancellation

Service: Amazon Elastic Kubernetes Service

Contains information about the latest cancellation of an update to an Amazon EKS cluster.

Contents

reason

A message providing additional details about the cancellation, such as the reason for the cancellation or failure details.

Type: String

Required: No

status

The current status of the cancellation. Valid values are `InProgress`, `Failed`, and `Successful`.

Type: String

Valid Values: `InProgress | Failed | Successful`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Capability

Service: Amazon Elastic Kubernetes Service

An object representing a managed capability in an Amazon EKS cluster. This includes all configuration, status, and health information for the capability.

Contents

arn

The Amazon Resource Name (ARN) of the capability.

Type: String

Required: No

capabilityName

The unique name of the capability within the cluster.

Type: String

Required: No

clusterName

The name of the Amazon EKS cluster that contains this capability.

Type: String

Required: No

configuration

The configuration settings for the capability. The structure varies depending on the capability type.

Type: CapabilityConfigurationResponse object

Required: No

createdAt

The Unix epoch timestamp in seconds for when the capability was created.

Type: Timestamp

Required: No

deletePropagationPolicy

The delete propagation policy for the capability. Currently, the only supported value is `RETAIN`, which keeps all resources managed by the capability when the capability is deleted.

Type: String

Valid Values: `RETAIN`

Required: No

health

Health information for the capability, including any issues that may be affecting its operation.

Type: CapabilityHealth object

Required: No

modifiedAt

The Unix epoch timestamp in seconds for when the capability was last modified.

Type: Timestamp

Required: No

roleArn

The Amazon Resource Name (ARN) of the IAM role that the capability uses to interact with AWS services.

Type: String

Required: No

status

The current status of the capability. Valid values include:

- `CREATING` – The capability is being created.
- `ACTIVE` – The capability is running and available.
- `UPDATING` – The capability is being updated.

- `DELETING` – The capability is being deleted.
- `CREATE_FAILED` – The capability creation failed.
- `UPDATE_FAILED` – The capability update failed.
- `DELETE_FAILED` – The capability deletion failed.

Type: String

Valid Values: `CREATING | CREATE_FAILED | UPDATING | DELETING | DELETE_FAILED | ACTIVE | DEGRADED`

Required: No

tags

The metadata that you apply to a resource to help you categorize and organize them. Each tag consists of a key and an optional value. You define them.

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 AWS 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

type

The type of capability. Valid values are ACK, ARGOCD, or KRO.

Type: String

Valid Values: ACK | KRO | ARGOCD

Required: No

version

The version of the capability software that is currently running.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CapabilityConfigurationRequest

Service: Amazon Elastic Kubernetes Service

Configuration settings for a capability. The structure of this object varies depending on the capability type.

Contents

ack

Configuration settings specific to ACK (AWS Controllers for Kubernetes) capabilities. This field is only used when creating or updating an ACK capability.

Type: AckConfigRequest object

Required: No

argoCd

Configuration settings specific to Argo CD capabilities. This field is only used when creating or updating an Argo CD capability.

Type: ArgoCdConfigRequest object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CapabilityConfigurationResponse

Service: Amazon Elastic Kubernetes Service

The response object containing capability configuration details.

Contents

ack

Configuration settings for an ACK (AWS Controllers for Kubernetes) capability, including the cross-namespace reference setting and the list of disabled services.

Type: AckConfigResponse object

Required: No

argoCd

Configuration settings for an Argo CD capability, including the server URL and other Argo CD-specific settings.

Type: ArgoCdConfigResponse object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CapabilityHealth

Service: Amazon Elastic Kubernetes Service

Health information for a capability, including any issues that may be affecting its operation.

Contents

issues

A list of issues affecting the capability. If this list is empty, the capability is healthy.

Type: Array of CapabilityIssue objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CapabilityIssue

Service: Amazon Elastic Kubernetes Service

An issue affecting a capability's health or operation.

Contents

code

A code identifying the type of issue. This can be used to programmatically handle specific issue types.

Type: String

Valid Values: `AccessDenied | ClusterUnreachable`

Required: No

message

A human-readable message describing the issue and potential remediation steps.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CapabilitySummary

Service: Amazon Elastic Kubernetes Service

A summary of a capability, containing basic information without the full configuration details. This is returned by the `ListCapabilities` operation.

Contents

arn

The Amazon Resource Name (ARN) of the capability.

Type: String

Required: No

capabilityName

The unique name of the capability within the cluster.

Type: String

Required: No

createdAt

The Unix epoch timestamp in seconds for when the capability was created.

Type: Timestamp

Required: No

modifiedAt

The Unix epoch timestamp in seconds for when the capability was last modified.

Type: Timestamp

Required: No

status

The current status of the capability.

Type: String

Valid Values: `CREATING | CREATE_FAILED | UPDATING | DELETING | DELETE_FAILED | ACTIVE | DEGRADED`

Required: No

type

The type of capability. Valid values are `ACK`, `ARGOCD`, or `KRO`.

Type: String

Valid Values: `ACK | KRO | ARGOCD`

Required: No

version

The version of the capability software that is currently running.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Certificate

Service: Amazon Elastic Kubernetes Service

An object representing the `certificate-authority-data` for your cluster.

Contents

active

An object identifying the certificate authority that is currently signing certificates for the cluster.

Type: ActiveCertificateAuthority object

Required: No

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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CertificateAuthority

Service: Amazon Elastic Kubernetes Service

An object representing a certificate authority (CA) for an Amazon EKS cluster.

Contents

activatedAt

The Unix epoch timestamp in seconds for when the certificate authority was last activated as the cluster's signer. This value is absent if the certificate authority has never been activated.

Type: Timestamp

Required: No

activatedBy

The entity that most recently activated the certificate authority. A value of `EKS` indicates that Amazon EKS activated it automatically; `CUSTOMER` indicates that you activated it.

Type: String

Valid Values: `EKS` | `CUSTOMER`

Required: No

createdAt

The Unix epoch timestamp in seconds for when the certificate authority was created.

Type: Timestamp

Required: No

createdBy

The entity that created the certificate authority. Certificate authorities that you create are `CUSTOMER`; those that Amazon EKS provisions on your behalf, such as a cluster's initial certificate authority, are `EKS`.

Type: String

Valid Values: `EKS` | `CUSTOMER`

Required: No

data

The Base64-encoded public certificate of the certificate authority.

Type: String

Required: No

distributionStatus

The distribution status of the certificate authority, which tracks whether Amazon EKS has distributed its trust to the AWS managed components in your cluster (the control plane, Amazon EKS Auto Mode instances, and AWS Fargate nodes). Valid values are `IN_PROGRESS`, `COMPLETE`, `FAILED`, and `DELETING`. A successor CA can only be activated after its distribution status is `COMPLETE`.

Type: String

Valid Values: `IN_PROGRESS | COMPLETE | FAILED | DELETING`

Required: No

id

The unique identifier of the certificate authority.

Type: String

Required: No

rollbackAvailable

Indicates whether CA rollback is still available for this certificate authority. After you activate a successor CA, rollback lets you revert to the outgoing CA for a limited period while you finish updating any worker nodes or clients that were missed.

Type: Boolean

Required: No

scheduledEvents

The scheduled auto-activation events for the certificate authority, computed from its validity period.

Type: CertificateAuthorityScheduledEvents object

Required: No

signingStatus

The signing status of the certificate authority. `IN_USE` means the certificate authority is currently signing certificates for the cluster, `ACTIVATING` means it's being promoted to the signer, and `NOT_USED` means it's trusted by the cluster (for example, a successor CA during a rotation, or a retired outgoing CA) but isn't the signer.

Type: String

Valid Values: `NOT_USED | ACTIVATING | IN_USE`

Required: No

validity

The validity period of the certificate authority's certificate.

Type: CertificateAuthorityValidity object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CertificateAuthorityScheduledEvents

Service: Amazon Elastic Kubernetes Service

The scheduled events during which Amazon EKS may automatically activate a certificate authority, computed from its validity period. These events help ensure that a cluster's signing certificate authority is rotated before its certificate expires.

Contents

finalAutoActivation

The Unix epoch timestamp in seconds by which Amazon EKS will automatically activate this certificate authority if you haven't already activated it.

Type: Timestamp

Required: No

firstAutoActivation

The earliest Unix epoch timestamp in seconds at which Amazon EKS may automatically activate this certificate authority.

Type: Timestamp

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CertificateAuthoritySummary

Service: Amazon Elastic Kubernetes Service

Summary information about a certificate authority (CA) for an Amazon EKS cluster, returned by `ListCertificateAuthorities` and the certificate-authority write operations.

Contents

activatedAt

The Unix epoch timestamp in seconds for when the certificate authority was last activated. This value is absent if the certificate authority has never been activated.

Type: Timestamp

Required: No

activatedBy

The entity that most recently activated the certificate authority, either `CUSTOMER` or `EKS`.

Type: String

Valid Values: `EKS` | `CUSTOMER`

Required: No

createdAt

The Unix epoch timestamp in seconds for when the certificate authority was created.

Type: Timestamp

Required: No

createdBy

The entity that created the certificate authority, either `CUSTOMER` or `EKS`.

Type: String

Valid Values: `EKS` | `CUSTOMER`

Required: No

distributionStatus

The distribution status of the certificate authority: `IN_PROGRESS`, `COMPLETE`, `FAILED`, or `DELETING`.

Type: String

Valid Values: `IN_PROGRESS | COMPLETE | FAILED | DELETING`

Required: No

id

The unique identifier of the certificate authority.

Type: String

Required: No

signingStatus

The signing status of the certificate authority: `IN_USE`, `ACTIVATING`, or `NOT_USED`.

Type: String

Valid Values: `NOT_USED | ACTIVATING | IN_USE`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CertificateAuthorityValidity

Service: Amazon Elastic Kubernetes Service

The validity period of a certificate authority's certificate.

Contents

notAfter

The Unix epoch timestamp in seconds for the end of the certificate authority's validity period.

Type: Timestamp

Required: No

notBefore

The Unix epoch timestamp in seconds for the start of the certificate authority's validity period.

Type: Timestamp

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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

controlPlaneScalingConfig

The control plane scaling tier configuration. For more information, see EKS Provisioned Control Plane in the Amazon EKS User Guide.

Type: ControlPlaneScalingConfig object

Required: No

createdAt

The Unix epoch timestamp at object creation.

Type: Timestamp

Required: No

deletionProtection

The current deletion protection setting for the cluster. When `true`, deletion protection is enabled and the cluster cannot be deleted until protection is disabled. When `false`, the cluster can be deleted normally. This setting only applies to clusters in an active state.

Type: Boolean

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 AWS Outpost. This property isn't available for an Amazon EKS cluster on the AWS cloud.

Type: String

Required: No

identity

The identity provider information for the cluster.

Type: Identity object

Required: No

kubeApiServerConfig

The Kubernetes API server configuration for the cluster.

Type: KubeApiServerConfigResponse object

Required: No

kubeControllerManagerConfig

The Kubernetes controller manager configuration for the cluster.

Type: KubeControllerManagerConfigResponse object

Required: No

kubernetesNetworkConfig

The Kubernetes network configuration for the cluster.

Type: KubernetesNetworkConfigResponse object

Required: No

kubeSchedulerConfig

The Kubernetes scheduler configuration for the cluster.

Type: KubeSchedulerConfigResponse 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 AWS Outpost. This object isn't available for clusters on the AWS cloud.

Type: OutpostConfigResponse object

Required: No

platformVersion

The platform version of your Amazon EKS cluster. For more information about clusters deployed on the AWS 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 AWS 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 AWS 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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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

controlPlaneComponentConfig

The default control plane component configuration and constraints for this Kubernetes version.

Type: ControlPlaneConfigInfo object

Required: No

controlPlaneScalingTiers

The available provisioned control plane scaling tiers and their capabilities for this Kubernetes version.

Type: Array of ControlPlaneScalingTierInfo objects

Array Members: Maximum number of 10 items.

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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++

- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ControlPlaneConfigInfo

Service: Amazon Elastic Kubernetes Service

The control plane component configuration defaults and constraints.

Contents

kubeApiServerConfig

The Kubernetes API server configuration defaults and constraints.

Type: KubeApiServerVersionConfig object

Required: No

kubeControllerManagerConfig

The Kubernetes controller manager configuration defaults and constraints.

Type: KubeControllerManagerVersionConfig object

Required: No

kubeSchedulerConfig

The Kubernetes scheduler configuration defaults and constraints.

Type: KubeSchedulerVersionConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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

spreadLevel

Optional parameter to specify the placement group spread level for control plane instances. If not provided, Amazon EKS will deploy control plane instances without a placement group.

Type: String

Valid Values: `host | rack`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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

spreadLevel

The spread level used with the placement group for control plane instances on your local Amazon EKS cluster on AWS Outposts.

Type: String

Valid Values: `host | rack`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ControlPlaneScalingConfig

Service: Amazon Elastic Kubernetes Service

The control plane scaling tier configuration. For more information, see EKS Provisioned Control Plane in the Amazon EKS User Guide.

Contents

tier

The control plane scaling tier configuration. Available options are `standard`, `tier-xl`, `tier-2xl`, `tier-4xl, or tier-8xl`. For more information, see EKS Provisioned Control Plane in the Amazon EKS User Guide.

Type: String

Valid Values: `standard | tier-xl | tier-2xl | tier-4xl | tier-8xl`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ControlPlaneScalingTierInfo

Service: Amazon Elastic Kubernetes Service

Information about a provisioned control plane scaling tier.

Contents

apiRequestConcurrency

The maximum API request concurrency supported by this tier.

Type: Integer

Required: No

clusterDatabaseSizeGb

The maximum cluster database size in GB supported by this tier.

Type: Integer

Required: No

controlPlaneComponentConfigOverrides

The control plane component configuration overrides specific to this scaling tier.

Type: ControlPlaneConfigInfo object

Required: No

podSchedulingRatePerSecond

The maximum pod scheduling rate per second supported by this tier.

Type: Integer

Required: No

tierName

The name of the scaling tier.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CrdManagementConfiguration

Service: Amazon Elastic Kubernetes Service

Indicates the current configuration of Gateway API custom resource definition (CRD) management on your EKS Auto Mode cluster. For example, if CRD management is enabled or disabled. For more information, see EKS Auto Mode load balancing capability in the *Amazon EKS User Guide*.

Contents

managed

Indicates if Gateway API CRD management is enabled on your EKS Auto Mode cluster. If CRD management is enabled, EKS Auto Mode will create and update the Gateway API CRDs in your EKS Auto Mode cluster.

Type: Boolean

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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, AWS SDKs, or AWS CloudFormation, the default is `CONFIG_MAP`. If you create the cluster by using the AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

DurationConstraints

Service: Amazon Elastic Kubernetes Service

Constraints for a duration parameter.

Contents

max

The maximum allowed duration value.

Type: String

Required: No

min

The minimum allowed duration value.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

DurationParameterConfig

Service: Amazon Elastic Kubernetes Service

A duration parameter configuration with default value and constraints.

Contents

constraints

The constraints for the duration parameter.

Type: DurationConstraints object

Required: No

defaultValue

The default value for the duration parameter.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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

AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS account.

Type: Boolean

Required: No

gatewayApi

Indicates the current configuration of the Kubernetes Gateway API for 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: GatewayApiConfiguration object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

EncryptionConfig

Service: Amazon Elastic Kubernetes Service

The encryption configuration for the cluster.

Contents

provider

AWS Key Management Service (AWS KMS) key. Either the ARN or the alias can be used.

Type: Provider object

Required: No

resources

This member has been deprecated.

> **Important**
>
> Amazon EKS encrypts all Kubernetes API data with envelope encryption by default for clusters running Kubernetes version 1.28 or higher, so this field no longer affects which resources are encrypted.

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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

EtcdPlacementRequest

Service: Amazon Elastic Kubernetes Service

The placement configuration for the etcd instances of your local Amazon EKS cluster on an AWS Outpost. For more information, see Capacity considerations in the *Amazon EKS User Guide*.

Contents

spreadLevel

Optional parameter to specify the placement group spread level for etcd instances. If not provided, Amazon EKS will deploy etcd instances without a placement group.

Type: String

Valid Values: `host | rack`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

EtcdPlacementResponse

Service: Amazon Elastic Kubernetes Service

The placement configuration for the etcd instances of your local Amazon EKS cluster on an AWS Outpost. For more information, see Capacity considerations in the *Amazon EKS User Guide*.

Contents

spreadLevel

The spread level used with the placement group for etcd instances on your local Amazon EKS cluster on AWS Outposts.

Type: String

Valid Values: `host | rack`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

FargateProfile

Service: Amazon Elastic Kubernetes Service

An object representing an AWS 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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

FargateProfileSelector

Service: Amazon Elastic Kubernetes Service

An object representing an AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

GatewayApiConfiguration

Service: Amazon Elastic Kubernetes Service

Indicates the current configuration of the Kubernetes Gateway API for 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*.

Contents

crds

Indicates the current configuration of Gateway API custom resource definition (CRD) management on your EKS Auto Mode cluster. For example, if CRD management is enabled or disabled.

Type: CrdManagementConfiguration object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

HorizontalPodAutoscalerControllerConfigRequest

Service: Amazon Elastic Kubernetes Service

The horizontal pod autoscaler controller configuration for the Kubernetes controller manager.

Contents

horizontalPodAutoscalerSyncPeriod

The interval between each sync of the horizontal pod autoscaler. Valid values are single-unit durations such as `15s` or `1m`.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

HorizontalPodAutoscalerControllerConfigResponse

Service: Amazon Elastic Kubernetes Service

The horizontal pod autoscaler controller configuration for the Kubernetes controller manager.

Contents

horizontalPodAutoscalerSyncPeriod

The interval between each sync of the horizontal pod autoscaler.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

HorizontalPodAutoscalerControllerVersionConfig

Service: Amazon Elastic Kubernetes Service

The horizontal pod autoscaler controller version configuration.

Contents

horizontalPodAutoscalerSyncPeriod

The HPA sync period configuration with default value and constraints.

Type: DurationParameterConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 | ROLLBACK_READINESS`

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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 | ROLLBACK_READINESS`

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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 | ROLLBACK_READINESS`

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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

IntegerConstraints

Service: Amazon Elastic Kubernetes Service

Constraints for an integer parameter specifying allowed range.

Contents

max

The maximum allowed value.

Type: Integer

Required: No

min

The minimum allowed value.

Type: Integer

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

IntegerParameterConfig

Service: Amazon Elastic Kubernetes Service

An integer parameter configuration with default value and constraints.

Contents

constraints

The constraints for the integer parameter.

Type: IntegerConstraints object

Required: No

defaultValue

The default value for the integer parameter.

Type: Integer

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

IntegerRangeConstraint

Service: Amazon Elastic Kubernetes Service

An integer range constraint specifying minimum and maximum allowed values.

Contents

max

The maximum allowed value.

Type: Integer

Required: No

min

The minimum allowed value.

Type: Integer

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 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 AWS 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 AWS 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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

KubeApiServerConfigRequest

Service: Amazon Elastic Kubernetes Service

The configuration for the Kubernetes API server on an Amazon EKS cluster.

Contents

eventTtl

The duration that Kubernetes events are retained. Valid values are single-unit durations such as `30m` or `1h`.

Type: String

Required: No

serviceNodePortRange

The port range for NodePort services.

Type: ServiceNodePortRange object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

KubeApiServerConfigResponse

Service: Amazon Elastic Kubernetes Service

The Kubernetes API server configuration for an Amazon EKS cluster.

Contents

eventTtl

The duration that Kubernetes events are retained.

Type: String

Required: No

serviceNodePortRange

The port range for NodePort services.

Type: ServiceNodePortRange object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

KubeApiServerVersionConfig

Service: Amazon Elastic Kubernetes Service

The Kubernetes API server version-specific configuration defaults and constraints.

Contents

eventTtl

The event TTL configuration with default value and constraints.

Type: DurationParameterConfig object

Required: No

serviceNodePortRange

The service node port range configuration with default value and constraints.

Type: PortRangeParameterConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

KubeControllerManagerConfigRequest

Service: Amazon Elastic Kubernetes Service

The configuration for the Kubernetes controller manager on an Amazon EKS cluster.

Contents

horizontalPodAutoscalerControllerConfig

The horizontal pod autoscaler controller configuration.

Type: HorizontalPodAutoscalerControllerConfigRequest object

Required: No

podGcControllerConfig

The pod garbage collection controller configuration.

Type: PodGcControllerConfigRequest object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

KubeControllerManagerConfigResponse

Service: Amazon Elastic Kubernetes Service

The Kubernetes controller manager configuration for an Amazon EKS cluster.

Contents

horizontalPodAutoscalerControllerConfig

The horizontal pod autoscaler controller configuration.

Type: HorizontalPodAutoscalerControllerConfigResponse object

Required: No

podGcControllerConfig

The pod garbage collection controller configuration.

Type: PodGcControllerConfigResponse object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

KubeControllerManagerVersionConfig

Service: Amazon Elastic Kubernetes Service

The Kubernetes controller manager version-specific configuration defaults and constraints.

Contents

horizontalPodAutoscalerControllerConfig

The horizontal pod autoscaler controller configuration with default value and constraints.

Type: HorizontalPodAutoscalerControllerVersionConfig object

Required: No

podGcControllerConfig

The pod garbage collection controller configuration with default value and constraints.

Type: PodGcControllerVersionConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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

serviceIpv4Cidr

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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

KubernetesNetworkConfigResponse

Service: Amazon Elastic Kubernetes Service

The Kubernetes network configuration for the cluster. The response contains a value for **serviceIpv6Cidr** or **serviceIpv4Cidr**, 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

serviceIpv4Cidr

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

serviceIpv6Cidr

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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

KubeSchedulerConfigRequest

Service: Amazon Elastic Kubernetes Service

The configuration for the Kubernetes scheduler on an Amazon EKS cluster.

Contents

nodeResourcesFit

The node resource fit scoring configuration for the scheduler.

Type: NodeResourcesFitConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

KubeSchedulerConfigResponse

Service: Amazon Elastic Kubernetes Service

The Kubernetes scheduler configuration for an Amazon EKS cluster.

Contents

nodeResourcesFit

The node resource fit scoring configuration for the scheduler.

Type: NodeResourcesFitConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

KubeSchedulerVersionConfig

Service: Amazon Elastic Kubernetes Service

The Kubernetes scheduler version-specific configuration defaults and constraints.

Contents

nodeResourcesFit

The NodeResourcesFit configuration with default value and constraints.

Type: NodeResourcesFitVersionConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MarketplaceInformation

Service: Amazon Elastic Kubernetes Service

Information about an Amazon EKS add-on from the AWS Marketplace.

Contents

productId

The product ID from the AWS Marketplace.

Type: String

Required: No

productUrl

The product URL from the AWS Marketplace.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 | BOTTLEROCKET_ARM_64_NVIDIA_FIPS | BOTTLEROCKET_x86_64_NVIDIA_FIPS | WINDOWS_CORE_2019_x86_64 | WINDOWS_FULL_2019_x86_64 | WINDOWS_CORE_2022_x86_64 | WINDOWS_FULL_2022_x86_64 | WINDOWS_CORE_2025_x86_64 | WINDOWS_FULL_2025_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 AWS 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 AWS 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

warmPoolConfig

The warm pool configuration attached to the node group. Amazon EKS manages warm pools throughout the node group lifecycle using the `AWSServiceRoleForAmazonEKSNodegroup` service-linked role to create, update, and delete warm pool resources.

Type: WarmPoolConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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

maxParallelNodesRepairedCount

Specify the maximum number of nodes that can be repaired concurrently or in parallel, expressed as a count of unhealthy nodes. This gives you finer-grained control over the pace of node replacements. When using this, you cannot also set `maxParallelNodesRepairedPercentage` at the same time.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

maxParallelNodesRepairedPercentage

Specify the maximum number of nodes that can be repaired concurrently or in parallel, expressed as a percentage of unhealthy nodes. This gives you finer-grained control over the pace of node replacements. When using this, you cannot also set `maxParallelNodesRepairedCount` at the same time.

Type: Integer

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

Required: No

maxUnhealthyNodeThresholdCount

Specify a count threshold of unhealthy nodes, above which node auto repair actions will stop. When using this, you cannot also set `maxUnhealthyNodeThresholdPercentage` at the same time.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

maxUnhealthyNodeThresholdPercentage

Specify a percentage threshold of unhealthy nodes, above which node auto repair actions will stop. When using this, you cannot also set `maxUnhealthyNodeThresholdCount` at the same time.

Type: Integer

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

Required: No

nodeRepairConfigOverrides

Specify granular overrides for specific repair actions. These overrides control the repair action and the repair delay time before a node is considered eligible for repair. If you use this, you must specify all the values.

Type: Array of NodeRepairConfigOverrides objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

NodeRepairConfigOverrides

Service: Amazon Elastic Kubernetes Service

Specify granular overrides for specific repair actions. These overrides control the repair action and the repair delay time before a node is considered eligible for repair. If you use this, you must specify all the values.

Contents

minRepairWaitTimeMins

Specify the minimum time in minutes to wait before attempting to repair a node with this specific `nodeMonitoringCondition` and `nodeUnhealthyReason`.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

nodeMonitoringCondition

Specify an unhealthy condition reported by the node monitoring agent that this override would apply to.

Type: String

Required: No

nodeUnhealthyReason

Specify a reason reported by the node monitoring agent that this override would apply to.

Type: String

Required: No

repairAction

Specify the repair action to take for nodes when all of the specified conditions are met.

Type: String

Valid Values: `Replace | Reboot | NoAction`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

NodeResourcesFitConfig

Service: Amazon Elastic Kubernetes Service

The NodeResourcesFit plugin configuration for the Kubernetes scheduler.

Contents

scoringStrategy

The scoring strategy used to rank nodes during scheduling.

Type: ScoringStrategy object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

NodeResourcesFitVersionConfig

Service: Amazon Elastic Kubernetes Service

The NodeResourcesFit version configuration with default value and constraints.

Contents

scoringStrategy

The scoring strategy configuration with default value and constraints.

Type: ScoringStrategyConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

OutpostConfigRequest

Service: Amazon Elastic Kubernetes Service

The configuration of your local Amazon EKS cluster on an AWS 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 AWS cloud.

Contents

controlPlaneInstanceType

The Amazon EC2 instance type for the Kubernetes control plane instances of your local Amazon EKS cluster on AWS Outposts. This instance type applies to all control plane instances and cannot be changed after cluster creation.

For more information, see Capacity considerations in the *Amazon EKS User Guide*.

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 AWS Outpost. For more information, see Capacity considerations in the *Amazon EKS User Guide*.

Type: ControlPlanePlacementRequest object

Required: No

etcdInstanceType

The Amazon EC2 instance type for etcd instances of your local Amazon EKS cluster on AWS Outposts. This instance type applies to all etcd instances and cannot be changed after cluster creation.

Type: String

Required: No

etcdPlacement

An object representing the placement configuration for the etcd instances of your local Amazon EKS cluster on an AWS Outpost. For more information, see Capacity considerations in the *Amazon EKS User Guide*.

Type: EtcdPlacementRequest object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

OutpostConfigResponse

Service: Amazon Elastic Kubernetes Service

An object representing the configuration of your local Amazon EKS cluster on an AWS Outpost. This API isn't available for Amazon EKS clusters on the AWS cloud.

Contents

controlPlaneInstanceType

The Amazon EC2 instance type for the Kubernetes control plane instances of your local Amazon EKS cluster on AWS Outposts. 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 AWS Outpost. For more information, see Capacity considerations in the *Amazon EKS User Guide*.

Type: ControlPlanePlacementResponse object

Required: No

etcdInstanceType

The Amazon EC2 instance type for etcd instances of your local Amazon EKS cluster on AWS Outposts. The instance type is the same for all etcd instances.

Type: String

Required: No

etcdPlacement

An object representing the placement configuration for the etcd instances of your local Amazon EKS cluster on an AWS Outpost. For more information, see Capacity considerations in the *Amazon EKS User Guide*.

Type: EtcdPlacementResponse object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PodGcControllerConfigRequest

Service: Amazon Elastic Kubernetes Service

The pod garbage collection controller configuration for the Kubernetes controller manager.

Contents

terminatedPodGcThreshold

The number of terminated pods that can exist before the garbage collector starts deleting them.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000000.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PodGcControllerConfigResponse

Service: Amazon Elastic Kubernetes Service

The pod garbage collection controller configuration for the Kubernetes controller manager.

Contents

terminatedPodGcThreshold

The number of terminated pods that can exist before the garbage collector starts deleting them.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000000.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PodGcControllerVersionConfig

Service: Amazon Elastic Kubernetes Service

The pod garbage collection controller version configuration.

Contents

terminatedPodGcThreshold

The terminated pod garbage collection threshold configuration with default value and constraints.

Type: IntegerParameterConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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

policy

An optional IAM policy in JSON format (as an escaped string) that applies additional restrictions to this pod identity association beyond the IAM policies attached to the IAM role. This policy is applied as the intersection of the role's policies and this policy, allowing you to reduce the permissions that applications in the pods can use. Use this policy to enforce least privilege access while still leveraging a shared IAM role across multiple applications.

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 AWS 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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PortRangeConstraints

Service: Amazon Elastic Kubernetes Service

Constraints for a port range parameter.

Contents

maxPort

The constraints for the maximum port value.

Type: IntegerRangeConstraint object

Required: No

minPort

The constraints for the minimum port value.

Type: IntegerRangeConstraint object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PortRangeParameterConfig

Service: Amazon Elastic Kubernetes Service

A port range parameter configuration with default value and constraints.

Contents

constraints

The constraints for the port range parameter.

Type: PortRangeConstraints object

Required: No

defaultValue

The default port range value.

Type: ServiceNodePortRange object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Provider

Service: Amazon Elastic Kubernetes Service

Identifies the AWS Key Management Service (AWS 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 AWS 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 *AWS Key Management Service Developer Guide*.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS Transit Gateway, AWS Site-to-Site VPN, or AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS Transit Gateway, AWS Site-to-Site VPN, or AWS 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 AWS Transit Gateway, AWS Site-to-Site VPN, or AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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

cidrs

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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ResourceConstraints

Service: Amazon Elastic Kubernetes Service

Constraints for resource weight entries.

Contents

name

The allowed values for resource names.

Type: AllowedValuesConstraint object

Required: No

weight

The allowed range for resource weight values.

Type: IntegerRangeConstraint object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ResourceWeight

Service: Amazon Elastic Kubernetes Service

A resource weight entry for the scheduler scoring strategy.

Contents

name

The name of the resource (for example, `cpu` or `memory`).

Type: String

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

Required: No

weight

The weight assigned to the resource for scoring. Must be between 1 and 100.

Type: Integer

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

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

RollbackConfig

Service: Amazon Elastic Kubernetes Service

The rollback configuration for the cluster version rollback.

Contents

timeoutMinutes

The length of time in minutes to wait before cancelling the update. Timeout is a minimum-bound property, meaning the timeout occurs no sooner than the time you specify, but can occur shortly thereafter. This value can be between 120 (2 hours) and 10080 (7 days). Default: 720 (12 hours) if not specified.

Type: Integer

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ScoringStrategy

Service: Amazon Elastic Kubernetes Service

The scoring strategy configuration for the NodeResourcesFit scheduler plugin.

Contents

resources

The resource weights used for scoring nodes.

Type: Array of ResourceWeight objects

Array Members: Maximum number of 100 items.

Required: No

type

The scoring strategy type. Valid values are `LeastAllocated` or `MostAllocated`.

Type: String

Valid Values: `LeastAllocated | MostAllocated`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ScoringStrategyConfig

Service: Amazon Elastic Kubernetes Service

The scoring strategy configuration with default value and constraints.

Contents

constraints

The constraints for the scoring strategy.

Type: ScoringStrategyConstraints object

Required: No

defaultValue

The default scoring strategy.

Type: ScoringStrategy object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ScoringStrategyConstraints

Service: Amazon Elastic Kubernetes Service

Constraints for the scoring strategy configuration.

Contents

resources

The constraints for resource weights.

Type: ResourceConstraints object

Required: No

scoringStrategy

The allowed values for the scoring strategy type.

Type: AllowedValuesConstraint object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ServiceNodePortRange

Service: Amazon Elastic Kubernetes Service

The port range for Kubernetes NodePort services.

Contents

maxPort

The maximum port number in the range.

Type: Integer

Required: No

minPort

The minimum port number in the range.

Type: Integer

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

SsoIdentity

Service: Amazon Elastic Kubernetes Service

An IAM Identity CenterIAM; Identity Center identity (user or group) that can be assigned permissions in a capability.

Contents

id

The unique identifier of the IAM Identity CenterIAM; Identity Center user or group.

Type: String

Required: Yes

type

The type of identity. Valid values are SSO_USER or SSO_GROUP.

Type: String

Valid Values: SSO_USER | SSO_GROUP

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Update

Service: Amazon Elastic Kubernetes Service

An object representing an asynchronous update.

Contents

cancellation

The latest cancellation information for the update. This field is present only if any cancellation is attempted for the update.

Type: Cancellation object

Required: No

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 | DeletionProtectionUpdate | CapabilityUpdate | ControlPlaneScalingConfigUpdate | VendedLogsUpdate | ControlPlaneEgressUpdate | VersionRollback | ControlPlaneComponentConfigUpdate | CertificateAuthorityUpdate`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

UpdateAckConfig

Service: Amazon Elastic Kubernetes Service

Configuration updates for an ACK (AWS Controllers for Kubernetes) capability. You only need to specify the fields that you want to update.

Contents

disabledServices

An updated list of ACK service names whose controllers are turned off for this capability. This list replaces the previous list instead of merging with it, so specify the complete set of services that you want turned off. If you omit this field, the previous list is unchanged. To turn all services back on, specify an empty list.

Type: Array of strings

Array Members: Maximum number of 200 items.

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

Pattern: `^[a-z][a-z0-9]*$`

Required: No

enableCrossNamespace

Specifies whether ACK controllers resolve resource references to resources in a different Kubernetes namespace. Set this value to `false` to require references to remain within the same namespace, or `true` to allow cross-namespace references. If you omit this field, the current value is unchanged.

Type: Boolean

Required: No

See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

UpdateArgoCdConfig

Service: Amazon Elastic Kubernetes Service

Configuration updates for an Argo CD capability. You only need to specify the fields you want to update.

Contents

networkAccess

Updated network access configuration for the Argo CD capability's managed API server endpoint. You can add or remove VPC endpoint associations to control which VPCs have private access to the Argo CD server.

Type: ArgoCdNetworkAccessConfigRequest object

Required: No

rbacRoleMappings

Updated RBAC role mappings for the Argo CD capability. You can add, update, or remove role mappings.

Type: UpdateRoleMappings object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

UpdateCapabilityConfiguration

Service: Amazon Elastic Kubernetes Service

Configuration updates for a capability. The structure varies depending on the capability type.

Contents

ack

Configuration updates specific to ACK (AWS Controllers for Kubernetes) capabilities.

Type: UpdateAckConfig object

Required: No

argoCd

Configuration updates specific to Argo CD capabilities.

Type: UpdateArgoCdConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 | DeletionProtection | NodeRepairConfig | RoleArn | RoleMappingsToAddOrUpdate | RoleMappingsToRemove | NetworkAccess | VendedLogs | UpdatedTier | PreviousTier | EnableCrossNamespace | DisabledServices | WarmPoolEnabled | WarmPoolMaxGroupPreparedCapacity | WarmPoolMinSize | WarmPoolState | WarmPoolReuseOnScaleIn | ControlPlaneEgressMode | KubeApiServerConfig | KubeSchedulerConfig | KubeControllerManagerConfig | ActiveCertificateAuthority | TrustedCertificateAuthorities | CertificateAuthorityId | SigningStatus`

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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

UpdateRoleMappings

Service: Amazon Elastic Kubernetes Service

Updates to RBAC role mappings for an Argo CD capability. You can add, update, or remove role mappings in a single operation.

Contents

addOrUpdateRoleMappings

A list of role mappings to add or update. If a mapping for the specified role already exists, it will be updated with the new identities. If it doesn't exist, a new mapping will be created.

Type: Array of ArgoCdRoleMapping objects

Required: No

removeRoleMappings

A list of role mappings to remove from the RBAC configuration. Each mapping specifies an Argo CD role (`ADMIN`, `EDITOR`, or `VIEWER`) and the identities to remove from that role.

Type: Array of ArgoCdRoleMapping objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

VpcConfigRequest

Service: Amazon Elastic Kubernetes Service

An object representing the VPC configuration to use for an Amazon EKS cluster.

Contents

controlPlaneEgressMode

Specifies the control plane egress routing mode for the cluster. If the cluster is set to `AWS_MANAGED`, Amazon EKS manages the egress path from the control plane and you don't need to configure NAT gateways or other routing infrastructure for control plane traffic. If the cluster is set to `CUSTOMER_ROUTED`, you manage the egress path from the control plane in your VPC subnets. You are responsible for ensuring that the control plane can reach required endpoints such as webhook servers and OIDC providers. The default value is `AWS_MANAGED`. Once set to `CUSTOMER_ROUTED`, this setting cannot be changed back to `AWS_MANAGED` on the same cluster.

Learn more about control plane egress routing in the *Amazon EKS User Guide*.

Type: String

Valid Values: `AWS_MANAGED | CUSTOMER_ROUTED | CUSTOMER_ISOLATED`

Required: No

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 AWS 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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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

controlPlaneEgressMode

The current control plane egress routing mode for the cluster. If the cluster is set to `AWS_MANAGED`, Amazon EKS manages the egress path from the control plane. If the cluster is set to `CUSTOMER_ROUTED`, you manage the egress path from the control plane in your VPC subnets.

Learn more about control plane egress routing in the *Amazon EKS User Guide*.

Type: String

Valid Values: `AWS_MANAGED | CUSTOMER_ROUTED | CUSTOMER_ISOLATED`

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 AWS 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 AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

WarmPoolConfig

Service: Amazon Elastic Kubernetes Service

The configuration for an Amazon EC2 Auto Scaling warm pool attached to an Amazon EKS managed node group. Warm pools maintain pre-initialized EC2 instances alongside your Auto Scaling group that have already completed the bootup initialization process and can be kept in a `Stopped`, `Running`, or `Hibernated` state.

Contents

enabled

Specifies whether to attach warm pools on the managed node group. Set to `true` to enable the warm pool, or `false` to disable and remove it. If not specified during an update, the current value is preserved.

Type: Boolean

Required: No

maxGroupPreparedCapacity

The maximum total number of instances across the warm pool and Auto Scaling group combined. This value controls the total prepared capacity available for your node group.

Type: Integer

Required: No

minSize

The minimum number of instances to maintain in the warm pool. Default: `0`. Size your warm pool based on scaling patterns to balance cost and availability. Start with 10-20% of expected peak capacity.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

poolState

The desired state for warm pool instances. Default: `Stopped`. Valid values are `Stopped` (most cost-effective with EBS storage costs only), `Running` (fastest transition time with full EC2

costs), and `Hibernated` (balance between cost and speed, only supported on specific instance types). Warm pool instances in the `Hibernated` state are not supported with Bottlerocket AMIs.

Type: String

Valid Values: `STOPPED | RUNNING | HIBERNATED`

Required: No

reuseOnScaleIn

Indicates whether instances should return to the warm pool during scale-in events instead of being terminated. Default: `false`. Enable this to reduce costs by reusing instances. This feature is not supported for Bottlerocket AMIs.

Type: Boolean

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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, AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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-`*`clustername-podname-random UUID`*

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Credentials

Service: Amazon EKS Auth

The *AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Java V2
- AWS 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 AWS 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 AWS 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 AWS 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 AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS STS, see AWS services that work with IAM in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS 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 AWS 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 AWS 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 AWS 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 AWS 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 AWS 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

ValidationError

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

HTTP Status Code: 400