Application Service Mesh

API Reference

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1 Before You Start

Overview

Welcome to use Application Service Mesh (ASM). ASM provides full-lifecycle management and traffic management of cloud-native containerized applications in a non-intrusive manner. Compatible with the Kubernetes and Istio ecosystems, ASM features intelligent, flexible traffic services including full-process automatic management of grayscale releases, graphical application topologies, and visualized traffic management.

This document describes how to use application programming interfaces (APIs) to perform operations on service meshes, such as creating, deleting, and querying service meshes. For details about all supported operations, see **API**.

If you plan to access ASM through an API, ensure that you are familiar with ASM concepts.

API Calling

ASM provides Representational State Transfer (REST) APIs. You can call these APIs using HTTPS.

For details about API calling, see **Calling APIs**.

Constraints

To use ASM, make sure you apply for the full permissions of Cloud Container Engine (CCE) as your ASM permissions are related to CCE permissions.

Basic Concepts

- Account

  An account is created after successful registration with Huawei Cloud. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity and should not be used directly to perform routine management. For security purposes, create users and grant them permissions for routine management.

- User

A user is created by an account to use cloud services. Each user has its own identity credentials (password or access keys).

A user can view the account ID and user ID on the **My Credentials** page of the console. The account, username, and password will be required for API authentication.

- Region

  Regions are divided based on geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are shared within the same region. Regions are classified into universal regions and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides specific services for specific tenants.

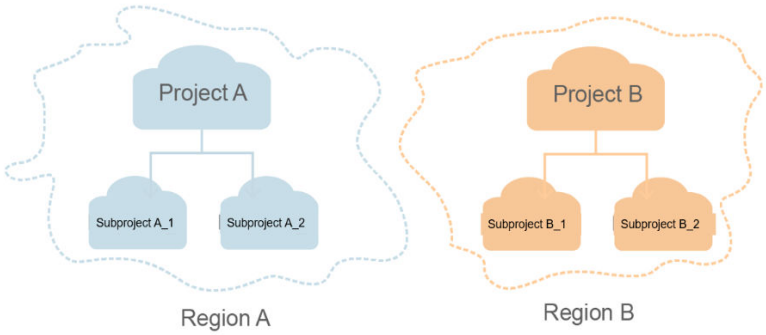
- Availability zone

  An availability zone (AZ) contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Within an AZ, compute, network, storage, and other resources are logically divided into multiple clusters. AZs within a region are interconnected by optical fibers for high-availability networking.

- Project

  A Huawei Cloud region corresponds to a project. Default projects are defined to group and physically isolate resources (including compute, storage, and network resources) across regions. You can grant users permissions in a default project to access all resources in the region associated with the project. If you need more refined access control, you can create subprojects under a default project and purchase resources in subprojects. Then you can grant users the permissions required to access only the resources in specific subprojects.

  Figure 1-1 Project isolation model

  To view a project ID, go to the **My Credentials** page.

- Enterprise project

  Enterprise projects allow you to group and manage resources across regions. Resources in enterprise projects are logically isolated from each other. An enterprise project can contain resources of multiple regions, and you can easily add resources to or remove resources from enterprise projects.

2 API Overview

You can create, delete, and query service meshes using the APIs provided by ASM.

API	Description
Creating a Service Mesh	This API is used to create a service mesh.
Deleting a Service Mesh	This API is used to delete an application service mesh.
Querying a Service Mesh	This API is used to obtain details about a service mesh.
Querying the Service Mesh List	This API is used to obtain details about all service meshes.

3 Calling APIs

3.1 Making an API Request

This section describes the structure of a REST API request, and uses the IAM API for as an example to demonstrate how to call an API. The obtained token can then be used to authenticate the calling of other APIs.

Request URI

A request URI is in the following format:

{URI-scheme} :// {Endpoint} / {resource-path} ? {query-string}

Although a request URI is included in the request header, most programming languages or frameworks require the request URI to be transmitted separately.

- **URI-scheme**: protocol used to send requests. All APIs use **HTTPS**.
- **Endpoint**: domain name or IP address of the server bearing the REST service endpoint. Endpoints vary depending on services and regions.
- **resource-path**: API access path. Obtain the path from the URI of an API. For example, **resource-path** of the API used to **obtain a user token** is **/v3/auth/tokens**.
- **query-string**: query parameters, which are optional. Ensure that a question mark (**?**) is included in front of each query parameter that is in the format of "*Parameter name*=*Parameter value*". For example, **? limit=10** indicates that up to 10 data records will be displayed.

For example, if you want to obtain an IAM token in **CN North-Beijing1**, use the endpoint of IAM (**iam.cn-north-1.myhuaweicloud.com**) for this region and **resource-path** (**/v3/auth/tokens**) in the URI of the API used to obtain a user token. Then, construct the URI as follows:

NOTE

To simplify the URI display in this document, each API is provided only with **resource-path** and a request method. The **URI-scheme** value of all APIs is **HTTPS**, and the endpoints of all APIs in the same region are identical.

Request Methods

[Example]

The HTTP protocol defines the following request methods that can be used to send a request to the server:

- **GET**: requests the server to return specified resources.
- **PUT**: requests the server to update specified resources.
- **POST**: requests the server to add resources or perform special operations.
- **DELETE**: requests the server to delete specified resources, for example, an object.
- **HEAD**: requests the server to return the response header only.
- **PATCH**: requests the server to update partial content of a specified resource. If the resource is unavailable, the PATCH method is used to create a resource.

For example, in the URI for obtaining a user token, the request method is **POST**. The request is as follows:

```
POST https://iam.cn-north-1.myhuaweicloud.com/v3/auth/tokens
```

Request Headers

[Example]

You can also add additional fields to a request, such as the fields required by a specified URI or HTTP method. For example, to request authentication information, add **Content-Type**, which specifies the request body type.

Common request headers are as follows:

- **Content-Type**: specifies the request body type or format. This field is mandatory and its default value is **application/json**. Other values of this field will be provided for specific APIs if any.
- **X-Auth-Token**: specifies a user token. This field is mandatory only when token-based authentication is used. The user token is a response to the API for obtaining a user token. This API is the only one that does not require authentication.
- **X-Project-ID**: specifies a subproject ID. This field is optional and can be used in multi-project scenarios.
- **X-Domain-ID**: specifies an account ID.

Since the API for obtaining a user token does not require authentication, you only need to include the **Content-Type** header in the request, as shown below:

```
POST https://iam.cn-north-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

Request Body

A request body is generally sent in structured format as specified in **Content-Type**. It transfers content except the request header. If the request body contains Chinese characters, these characters must be encoded in UTF-8.

The request body varies between APIs. Some APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

For the API used to obtain a user token, you can view request parameters and parameter description in the API request. The following provides an example request with a body included. Replace ***username***, ***domainname***, ********* (login password), and ***xxxxxxxxxx*** (project name) with the actual values. To learn how to obtain the project name, see "Regions and Endpoints".

NOTE

The **scope** parameter specifies where a token takes effect. You can set **scope** to an account or a project under an account.

```
Content-Type: application/json

{
    "auth": {
        "identity": {
            "methods": [
                "password"
            ],
            "password": {
                "user": {
                    "name": "username",
                    "password": "********",
                    "domain": {
                        "name": "domainname"
                    }
                }
            }
        },
        "scope": {
            "project": {
                "name": "xxxxxxxx"
            }
        }
    }
}
```

If all data required for the API request is available, you can send the request to call an API through **curl**, **Postman**, or coding. In the response to the API used to obtain a user token, **x-subject-token** is the target user token. This token can be used to authenticate the calling of other APIs.

3.2 Authentication

Requests for calling an API can be authenticated using either of the following methods:

- Token-based authentication: Requests are authenticated using tokens.
- AK/SK-based authentication: Requests are encrypted using AK/SK pairs.

Token-based Authentication

[Example]

NOTE

The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently API calling.

Ensure that the token is valid when you use it. Using a token that will soon expire may cause API calling failures.

A token specifies permissions in a computer system. During token-based authentication, the token is added to requests to get permissions for calling the API.

When calling the API for obtaining a user token, set **auth.scope** in the request body to **project**.

```
{
    "auth": {
        "identity": {
            "methods": [
                "password"
            ],
            "password": {
                "user": {
                    "name": "username",
                    "password": "********",
                    "domain": {
                        "name": "domainname"
                    }
                }
            }
        },
        "scope": {
            "project": {
                "name": "xxxxxxxx"
            }
        }
    }
}
```

After obtaining the token, add the **X-Auth-Token** header in a request to specify the token when calling other APIs. For example, if the token is **ABCDEFJ....**, add **X-Auth-Token: ABCDEFJ....** to the request as follows:

```
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

AK/SK-based Authentication

[Example]

NOTE

AK/SK-based authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token-based authentication is recommended.

In AK/SK-based authentication, AK/SK is used to sign requests and the signature is then added to the requests for authentication.

- AK: access key ID, which is a unique identifier used with a secret access key to sign requests cryptographically.
- SK: secret access key, which is used with an AK to sign requests cryptographically. It identifies a request sender and prevents the request from being modified.

In AK/SK-based authentication, you can use an AK/SK to sign requests based on the signature algorithm or using the signing SDK to sign requests.

NOTICE

The signing SDK is only used for signing requests and is different from the SDKs provided by services.

3.3 Response

Status Code

[Example]

After sending a request, you will receive a response that includes a status code, response header, and response body.

A status code is a group of digits, ranging from 1xx to 5xx. It indicates the status of a request. For more information, see **Status Codes**.

If status code **201** is returned for the calling of the API for obtaining a user token, the request is successful.

Response Header

[Example]

Similar to a request, a response also has a header, for example, **Content-Type**.

Figure 3-1 shows the response header for the API used to obtain a user token, where **x-subject-token** is the desired user token. This token can be used to authenticate the calling of other APIs.

Figure 3-1 Response header for the API used to obtain a user token

Response Body

[Example]

A response body is generally sent in structured format as specified in **Content-Type**. The response body transfers content except the response header.

The following shows part of the response body for the API of obtaining a user token.

```
{
    "token": {
        "expires_at": "2019-02-13T06:52:13.855000Z",
        "methods": [
            "password"
        ],
        "catalog": [
            {
                "endpoints": [
                    {
                        "region_id": "",
.....
```

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.

```
{
    "error_msg": "The format of message is error",
    "error_code": "AS.0001"
}
```

In the preceding information, **error_code** indicates an error code, and **error_msg** describes the error.

4 API

4.1 Service Mesh APIs

4.1.1 Creating a Service Mesh

Function

This API is used to create a service mesh.

URI

POST /v1/{project_id}/meshes

Table 4-1 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-2 Request header parameters

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Message body type or format.

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or AK/SK. If token-based authentication is used, this parameter is mandatory and must be set to a user token.

Table 4-3 Parameters in the request body

Parameter	Mandatory	Type	Description
apiVersion	Yes	String	API version. The value is fixed at **v1** and cannot be changed.
kind	Yes	String	API type. The value is fixed at **Mesh** or **mesh** and cannot be changed.
metadata	Yes	**Table 4-4** object	Basic information about the service mesh. Metadata is a collection of attributes.
spec	Yes	**Table 4-5** object	Detailed description of the service mesh. ASM creates or updates the service mesh by **spec**.

Table 4-4 MeshMetadata

Parameter	Mandatory	Type	Description
name	Yes	String	Service mesh name. Enter 4 to 64 characters. The name must start with a lowercase letter and not end with a hyphen (-). Only lowercase letters, digits, and hyphens (-) are allowed.

Table 4-5 MeshSpec

Parameter	Mandatory	Type	Description
type	Yes	String	Service mesh type. **InCluster**: service mesh with an in-cluster control plane. The value is **InCluster** for the service mesh of the Basic edition.
version	Yes	String	Service mesh version.
extendParams	Yes	**Table 4-6** object	Extensions of the service mesh.
ipv6Enable	No	Boolean	Whether the service mesh supports IPv6.
config	No	**Table 4-12** object	Service mesh configuration.

Table 4-6 MeshExtendParams

Parameter	Mandatory	Type	Description
clusters	Yes	Array of **Table 4-7** objects	Cluster information in the service mesh.

Table 4-7 MeshCluster

Parameter	Mandatory	Type	Description
clusterID	Yes	String	Cluster ID, which is unique and can be used to query the cluster to be added.
injection	No	**Table 4-8** object	Sidecar injection configuration.
installation	Yes	**Table 4-9** object	Installation configuration of service mesh components.

Table 4-8 InjectionConfig

Parameter	Mandatory	Type	Description
namespaces	No	**Table 4-10** object	Namespaces where sidecars to be injected.

Table 4-9 InstallationConfig

Parameter	Mandatory	Type	Description
nodes	Yes	Table 4-10 object	Nodes where service mesh components are installed.

Table 4-10 Selector

Parameter	Mandatory	Type	Description
fieldSelector	Yes	Table 4-11 object	Field selector.

Table 4-11 FieldSelector

Parameter	Mandatory	Type	Description
key	Yes	String	Key.
operator	Yes	String	Operator. The value can only be **In**.
values	Yes	Array of strings	Values.

Table 4-12 MeshConfig

Parameter	Mandatory	Type	Description
proxyConfig	No	Table 4-13 object	Data plane configuration of the service mesh.
telemetryConfig	No	Table 4-14 object	Observability configuration of the service mesh.

Table 4-13 ProxyConfig

Parameter	Mandatory	Type	Description
includeIPRanges	No	String	IP address ranges that will be included for outbound traffic redirection. Use commas (,) to separate the IP address ranges.

Parameter	Mandatory	Type	Description
excludeIPRanges	No	String	IP address ranges that will be excluded for outbound traffic redirection. Use commas (,) to separate the IP address ranges.
excludeOutboundPorts	No	String	Ports that will be excluded for outbound traffic redirection. Use commas (,) to separate the ports.
excludeInboundPorts	No	String	Ports that will be excluded for inbound traffic redirection. Use commas (,) to separate the ports.
includeOutboundPorts	No	String	Ports that will be included for outbound traffic redirection. Use commas (,) to separate the ports.
includeInboundPorts	No	String	Ports that will be included for inbound traffic redirection. Use commas (,) to separate the ports.

Table 4-14 TelemetryConfig

Parameter	Mandatory	Type	Description
metrics	No	**Table 4-15** object	Application metric configuration, which is used to report service mesh metrics. To enable this configuration, you need to install the Cloud Native Cluster Monitoring add-on in the cluster.
accessLogging	No	**Table 4-17** object	Access log configuration, which is used to report access logs of Istio proxies in the service mesh. To enable this configuration, you need to install the Cloud Native Log Collection add-on in the cluster.
tracing	No	**Table 4-19** object	Tracing configuration, which is used to report traces in the service mesh.

Table 4-15 Metric

Parameter	Mandatory	Type	Description
aom	No	Array of **Table 4-16** objects	AOM instance configuration.

Table 4-16 Aom

Parameter	Mandatory	Type	Description
instanceID	Yes	String	AOM instance ID.

Table 4-17 AccessLogging

Parameter	Mandatory	Type	Description
lts	No	Array of **Table 4-18** objects	LTS configuration.

Table 4-18 LtsConfig

Parameter	Mandatory	Type	Description
logGroupID	No	String	Log group ID of access logs.
logStreamID	No	String	Log stream ID of access logs.

Table 4-19 Tracing

Parameter	Mandatory	Type	Description
randomSamplingPercentage	No	Float	Tracing sampling rate.

Parameter	Mandatory	Type	Description
defaultProviders	No	Array of strings	Name of the default provider that tracing reports data to, which must match the **name** field in **extensionProviders** or use the preset provider **apm-otel** of ASM. If **apm-otel** is used, ensure that APM 2.0 is supported in the current region and the service mesh version is later than 1.18.
extensionProviders	No	Array of **Table 4-20** objects	User-defined provider. Currently, Zipkin is supported. If you configure the Zipkin provider, ensure that the service mesh version is 1.15 or later.

Table 4-20 TracingExtensionProvider

Parameter	Mandatory	Type	Description
name	No	String	Provider name.
zipkin	No	**Table 4-21** object	Self-defined configuration of Zipkin.

Table 4-21 ZipkinTracingProvider

Parameter	Mandatory	Type	Description
service	No	String	Service address of Zipkin.
port	No	Integer	Service port of Zipkin.

Response Parameters

Status code: 201

Table 4-22 Parameters in the response body

Parameter	Type	Description
apiVersion	String	API version. The value is fixed at **v1** and cannot be changed.

Parameter	Type	Description
kind	String	API type. The value is fixed at **Mesh** or **mesh** and cannot be changed.
metadata	**Table 4-23** object	Basic information about the service mesh. Metadata is a collection of attributes.
spec	**Table 4-24** object	Detailed description of the service mesh. ASM creates or updates the service mesh by **spec**.
status	**Table 4-37** object	Service mesh status, which is automatically generated by ASM.

Table 4-23 MeshMetadata

Parameter	Type	Description
name	String	Service mesh name. Enter 4 to 64 characters. The name must start with a lowercase letter and not end with a hyphen (-). Only lowercase letters, digits, and hyphens (-) are allowed.
uid	String	Service mesh ID, which is unique and automatically generated after the service mesh is created. A custom value will not take effect.
creationTimestamp	String	Time when the service mesh was created.

Table 4-24 MeshSpec

Parameter	Type	Description
type	String	Service mesh type. **InCluster**: service mesh with an in-cluster control plane. The value is **InCluster** for the service mesh of the Basic edition.
version	String	Service mesh version.
extendParams	**Table 4-25** object	Extensions of the service mesh.
ipv6Enable	Boolean	Whether the service mesh supports IPv6.
config	**Table 4-27** object	Service mesh configuration.

Table 4-25 MeshExtendParams

Parameter	Type	Description
clusters	Array of **Table 4-26** objects	Information about clusters in service meshes (only for the Basic edition).

Table 4-26 MeshCluster

Parameter	Type	Description
clusterID	String	Cluster ID, which is unique and can be used to query the cluster to be added.

Table 4-27 MeshConfig

Parameter	Type	Description
proxyConfig	**Table 4-28** object	Data plane configuration of the service mesh.
telemetryConfig	**Table 4-29** object	Observability configuration of the service mesh.

Table 4-28 ProxyConfig

Parameter	Type	Description
includeIPRanges	String	IP address ranges that will be included for outbound traffic redirection. Use commas (,) to separate the IP address ranges.
excludeIPRanges	String	IP address ranges that will be excluded for outbound traffic redirection. Use commas (,) to separate the IP address ranges.
excludeOutboundPorts	String	Ports that will be excluded for outbound traffic redirection. Use commas (,) to separate the ports.
excludeInboundPorts	String	Ports that will be excluded for inbound traffic redirection. Use commas (,) to separate the ports.
includeOutbound-Ports	String	Ports that will be included for outbound traffic redirection. Use commas (,) to separate the ports.

Parameter	Type	Description
includeInboundPorts	String	Ports that will be included for inbound traffic redirection. Use commas (,) to separate the ports.

Table 4-29 TelemetryConfig

Parameter	Type	Description
metrics	**Table 4-30** object	Application metric configuration, which is used to report service mesh metrics. To enable this configuration, you need to install the Cloud Native Cluster Monitoring add-on in the cluster.
accessLogging	**Table 4-32** object	Access log configuration, which is used to report access logs of Istio proxies in the service mesh. To enable this configuration, you need to install the Cloud Native Log Collection add-on in the cluster.
tracing	**Table 4-34** object	Tracing configuration, which is used to report traces in the service mesh.

Table 4-30 Metric

Parameter	Type	Description
aom	Array of **Table 4-31** objects	AOM instance configuration.

Table 4-31 Aom

Parameter	Type	Description
instanceID	String	AOM instance ID.

Table 4-32 AccessLogging

Parameter	Type	Description
lts	Array of **Table 4-33** objects	LTS configuration.

Table 4-33 LtsConfig

Parameter	Type	Description
logGroupID	String	Log group ID of access logs.
logStreamID	String	Log stream ID of access logs.

Table 4-34 Tracing

Parameter	Type	Description
randomSamplingPercentage	Float	Tracing sampling rate.
defaultProviders	Array of strings	Name of the default provider that tracing reports data to, which must match the **name** field in **extensionProviders** or use the preset provider **apm-otel** of ASM. If **apm-otel** is used, ensure that APM 2.0 is supported in the current region and the service mesh version is later than 1.18.
extensionProviders	Array of **Table 4-35** objects	User-defined provider. Currently, Zipkin is supported. If you configure the Zipkin provider, ensure that the service mesh version is 1.15 or later.

Table 4-35 TracingExtensionProvider

Parameter	Type	Description
name	String	Provider name.
zipkin	**Table 4-36** object	Self-defined configuration of Zipkin.

Table 4-36 ZipkinTracingProvider

Parameter	Type	Description
service	String	Service address of Zipkin.
port	Integer	Service port of Zipkin.

Table 4-37 MeshStatus

Parameter	Type	Description
phase	String	Service mesh status. The options are as follows: • **Running**: The service mesh is running. • **Creating**: The service mesh is being created. • **CreateFailed**: The service mesh fails to be created. • **Deleting**: The service mesh is being deleted. • **DeleteFailed**: The service mesh fails to be deleted. • **Upgrading**: The service mesh is being upgraded. • **UpgradeFailed**: The service mesh fails to be upgraded. • **RollingBack**: The service mesh is being rolled back. • **RollbackFailed**: The service mesh fails to be rolled back.
updateTimestamp	String	Time when the service mesh was updated.

Status code: 400

Table 4-38 Parameters in the response body

Parameter	Type	Description
errorCode	String	Error code. Minimum length: **8** Maximum length: **36**
errorMsg	String	Error message. Minimum length: **2** Maximum length: **512**

Status code: 409

Table 4-39 Parameters in the response body

Parameter	Type	Description
errorCode	String	Error code. Minimum length: **8** Maximum length: **36**
errorMsg	String	Error message. Minimum length: **2** Maximum length: **512**

Status code: 500

Table 4-40 Parameters in the response body

Parameter	Type	Description
errorCode	String	Error code. Minimum length: **8** Maximum length: **36**
errorMsg	String	Error message. Minimum length: **2** Maximum length: **512**

Example Request

Creating a service mesh

```
POST /v1/719217bc273743xxxxxxxxae8bc34480/meshes

{
  "apiVersion" : "v1",
  "kind" : "Mesh",
  "metadata" : {
    "name" : "mesh-test-api"
  },
  "spec" : {
    "type" : "InCluster",
    "version" : "1.18.7-r5",
    "extendParams" : {
      "clusters" : [ {
        "clusterID" : "cb0ef541-xxxx-xxxx-xxxx-0255ac1001b7",
        "installation" : {
          "nodes" : {
            "fieldSelector" : {
              "key" : "UID",
              "operator" : "In",
              "values" : [ "1c531b0c-xxxx-xxxx-xxxx-0255ac100b08" ]
            }
          }
        },
        "injection" : {
```



```
        "namespaces" : {
          "fieldSelector" : {
            "key" : "Name",
            "operator" : "In",
            "values" : [ "default" ]
          }
        }
      }
    } ]
  },
  "config" : {
    "proxyConfig" : {
      "includeIPRanges" : "10.247.0.0/16"
    },
    "telemetryConfig" : {
      "metrics" : {
        "aom" : [ {
          "instanceID" : "602a5b7e-xxxx-xxxx-xxxx-4268c35b0424"
        } ]
      },
      "accessLogging" : {
        "lts" : [ {
          "logGroupID" : "b884eaeb-xxxx-xxxx-xxxx-f442de73c392",
          "logStreamID" : "362e11e8-xxxx-xxxx-xxxx-0afdc68da7d2"
        } ]
      },
      "tracing" : {
        "randomSamplingPercentage" : 1,
        "defaultProviders" : [ "zipkin" ],
        "extensionProviders" : [ {
          "name" : "zipkin",
          "zipkin" : {
            "service" : "zipkin.monitoring.svc.cluster.local",
            "port" : 9411
          }
        } ]
      }
    }
  }
}
```

Example Response

Status code: 201

The service mesh creation task is delivered and the service mesh creation starts.

```
{
  "kind" : "Mesh",
  "apiVersion" : "v1",
  "metadata" : {
    "name" : "mesh-test-api",
    "uid" : "a1efdc3e-xxxx-xxxx-xxxx-94bef433347e",
    "creationTimestamp" : "2025-04-10T07:48:37Z"
  },
  "spec" : {
    "type" : "InCluster",
    "version" : "1.18.7-r5",
    "config" : {
      "telemetryConfig" : {
        "metrics" : {
          "aom" : [ {
            "instanceID" : "602a5b7e-xxxx-xxxx-xxxx-4268c35b0424"
          } ]
        },
        "accessLogging" : {
          "lts" : [ {
            "logGroupID" : "b884eaeb-xxxx-xxxx-xxxx-f442de73c392",
```

```
          "logStreamID" : "362e11e8-xxxx-xxxx-xxxx-0afdc68da7d2"
        } ]
      },
      "tracing" : {
        "randomSamplingPercentage" : 1,
        "defaultProviders" : [ "zipkin" ],
        "extensionProviders" : [ {
          "name" : "zipkin",
          "zipkin" : {
            "service" : "zipkin.monitoring.svc.cluster.local",
            "port" : 9411
          }
        } ]
      }
    },
    "proxyConfig" : {
      "includeIPRanges" : "10.247.0.0/16"
    }
  },
  "extendParams" : {
    "clusters" : [ {
      "clusterID" : "cb0ef541-xxxx-xxxx-xxxx-0255ac1001b7"
    } ]
  }
 },
 "status" : {
  "phase" : "Creating"
 }
}
```


Status Codes

Status Code	Description
201	The service mesh creation task is delivered and the service mesh creation starts.
400	Verification failed due to incorrect parameters for creating the service mesh.
409	The service mesh to be created conflicts with an existing service mesh.
500	An error occurs during the service mesh creation.

Error Codes

For details, see **Error Codes**.

4.1.2 Deleting a Service Mesh

Function

This API is used to delete a service mesh.

URI

DELETE /v1/{project_id}/meshes/{mesh_id}

Table 4-41 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
mesh_id	Yes	String	Service mesh ID.

Request Parameters

Table 4-42 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or AK/SK. If token-based authentication is used, this parameter is mandatory and must be set to a user token.

Response Parameters

Status code: 200

Table 4-43 Parameters in the response body

Parameter	Type	Description
apiVersion	String	API version. The value is fixed at **v1** and cannot be changed.
kind	String	API type. The value is fixed at **Mesh** or **mesh** and cannot be changed.
metadata	**Table 4-44** object	Basic information about the service mesh. Metadata is a collection of attributes.
spec	**Table 4-45** object	Detailed description of the service mesh. ASM creates or updates the service mesh by **spec**.
status	**Table 4-58** object	Service mesh status, which is automatically generated by ASM.

Table 4-44 MeshMetadata

Parameter	Type	Description
name	String	Service mesh name. Enter 4 to 64 characters. The name must start with a lowercase letter and not end with a hyphen (-). Only lowercase letters, digits, and hyphens (-) are allowed.
uid	String	Service mesh ID, which is unique and automatically generated after the service mesh is created.
creationTimestamp	String	Time when the service mesh was created.

Table 4-45 MeshSpec

Parameter	Type	Description
type	String	Service mesh type. **InCluster**: service mesh with an in-cluster control plane. The value is **InCluster** for the service mesh of the Basic edition.
version	String	Service mesh version.
extendParams	**Table 4-46** object	Extensions of the service mesh.
ipv6Enable	Boolean	Whether the service mesh supports IPv6.
config	**Table 4-48** object	Service mesh configuration.

Table 4-46 MeshExtendParams

Parameter	Type	Description
clusters	Array of **Table 4-47** objects	Cluster information in the service mesh.

Table 4-47 MeshCluster

Parameter	Type	Description
clusterID	String	Cluster ID, which is unique and can be used to query the cluster to be added.

Table 4-48 MeshConfig

Parameter	Type	Description
proxyConfig	**Table 4-49** object	Data plane configuration of the service mesh.
telemetryConfig	**Table 4-50** object	Observability configuration of the service mesh.

Table 4-49 ProxyConfig

Parameter	Type	Description
includeIPRanges	String	IP address ranges that will be included for outbound traffic redirection. Use commas (,) to separate the IP address ranges.
excludeIPRanges	String	IP address ranges that will be excluded for outbound traffic redirection. Use commas (,) to separate the IP address ranges.
excludeOutboundPorts	String	Ports that will be excluded for outbound traffic redirection. Use commas (,) to separate the ports.
excludeInboundPorts	String	Ports that will be excluded for inbound traffic redirection. Use commas (,) to separate the ports.
includeOutbound-Ports	String	Ports that will be included for outbound traffic redirection. Use commas (,) to separate the ports.
includeInboundPorts	String	Ports that will be included for inbound traffic redirection. Use commas (,) to separate the ports.

Table 4-50 TelemetryConfig

Parameter	Type	Description
metrics	**Table 4-51** object	Application metric configuration, which is used to report service mesh metrics. To enable this configuration, you need to install the Cloud Native Cluster Monitoring add-on in the cluster.
accessLogging	**Table 4-53** object	Access log configuration, which is used to report access logs of Istio proxies in the service mesh. To enable this configuration, you need to install the Cloud Native Log Collection add-on in the cluster.
tracing	**Table 4-55** object	Tracing configuration, which is used to report traces in the service mesh.

Table 4-51 Metric

Parameter	Type	Description
aom	Array of **Table 4-52** objects	AOM instance configuration.

Table 4-52 Aom

Parameter	Type	Description
instanceID	String	AOM instance ID.

Table 4-53 AccessLogging

Parameter	Type	Description
lts	Array of **Table 4-54** objects	LTS configuration.

Table 4-54 LtsConfig

Parameter	Type	Description
logGroupID	String	Log group ID of access logs.
logStreamID	String	Log stream ID of access logs.

Table 4-55 Tracing

Parameter	Type	Description
randomSamplingPercentage	Float	Tracing sampling rate.
defaultProviders	Array of strings	Name of the default provider that tracing reports data to, which must match the **name** field in **extensionProviders** or use the preset provider **apm-otel** of ASM. If **apm-otel** is used, ensure that APM 2.0 is supported in the current region and the service mesh version is later than 1.18.
extensionProviders	Array of **Table 4-56** objects	User-defined provider. Currently, Zipkin is supported. If you configure the Zipkin provider, ensure that the service mesh version is 1.15 or later.

Table 4-56 TracingExtensionProvider

Parameter	Type	Description
name	String	Provider name.
zipkin	**Table 4-57** object	Self-defined configuration of Zipkin.

Table 4-57 ZipkinTracingProvider

Parameter	Type	Description
service	String	Service address of Zipkin.
port	Integer	Service port of Zipkin.

Table 4-58 MeshStatus

Parameter	Type	Description
phase	String	Service mesh status. The options are as follows: • **Running**: The service mesh is running. • **Creating**: The service mesh is being created. • **CreateFailed**: The service mesh fails to be created. • **Deleting**: The service mesh is being deleted. • **DeleteFailed**: The service mesh fails to be deleted. • **Upgrading**: The service mesh is being upgraded. • **UpgradeFailed**: The service mesh fails to be upgraded. • **RollingBack**: The service mesh is being rolled back. • **RollbackFailed**: The service mesh fails to be rolled back.
updateTimestamp	String	Time when the service mesh was updated.

Status code: 400

Table 4-59 Parameters in the response body

Parameter	Type	Description
errorCode	String	Error code. Minimum length: **8** Maximum length: **36**
errorMsg	String	Error message. Minimum length: **2** Maximum length: **512**

Status code: 404

Table 4-60 Parameters in the response body

Parameter	Type	Description
errorCode	String	Error code. Minimum length: **8** Maximum length: **36**
errorMsg	String	Error message. Minimum length: **2** Maximum length: **512**

Status code: 500

Table 4-61 Parameters in the response body

Parameter	Type	Description
errorCode	String	Error code. Minimum length: **8** Maximum length: **36**
errorMsg	String	Error message. Minimum length: **2** Maximum length: **512**

Example Request

None

Example Response

Status code: 200

The service mesh deletion task is delivered and the service mesh deletion starts.

```
{
  "kind" : "Mesh",
  "apiVersion" : "v1",
  "metadata" : {
    "name" : "mesh-test-api",
    "uid" : "a1efdc3e-xxxx-xxxx-xxxx-94bef433347e",
    "creationTimestamp" : "2025-04-10T07:48:37Z"
  },
  "spec" : {
    "type" : "InCluster",
    "version" : "1.18.7-r5",
    "config" : {
      "telemetryConfig" : {
        "metrics" : {
          "aom" : [ {
            "instanceID" : "602a5b7e-xxxx-xxxx-xxxx-4268c35b0424"
          } ]
```



```
      },
      "accessLogging" : {
        "lts" : [ {
          "logGroupID" : "b884eaeb-xxxx-xxxx-xxxx-f442de73c392",
          "logStreamID" : "362e11e8-xxxx-xxxx-xxxx-0afdc68da7d2"
        } ]
      },
      "tracing" : {
        "randomSamplingPercentage" : 1,
        "defaultProviders" : [ "zipkin" ],
        "extensionProviders" : [ {
          "name" : "zipkin",
          "zipkin" : {
            "service" : "zipkin.monitoring.svc.cluster.local",
            "port" : 9411
          }
        } ]
      }
    },
    "proxyConfig" : {
      "includeIPRanges" : "10.247.0.0/16"
    }
  },
  "extendParams" : {
    "clusters" : [ {
      "clusterID" : "cb0ef541-xxxx-xxxx-xxxx-0255ac1001b7"
    } ]
  }
 },
 "status" : {
  "phase" : "Deleting",
  "updateTimestamp" : "2025-04-10T08:10:45Z"
 }
}
```


Status Codes

Status Code	Description
200	The service mesh deletion task is delivered and the service mesh deletion starts.
400	Verification failed due to incorrect parameters for deleting the specified service mesh.
404	The specified service mesh is not found.
500	An error occurs during the service mesh deletion.

Error Codes

For details, see **Error Codes**.

4.1.3 Querying a Service Mesh

Function

This API is used to obtain details about a service mesh.

URI

GET /v1/{project_id}/meshes/{mesh_id}

Table 4-62 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
mesh_id	Yes	String	Service mesh ID.

Request Parameters

Table 4-63 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or AK/SK. If token-based authentication is used, this parameter is mandatory and must be set to a user token.

Response Parameters

Status code: 200

Table 4-64 Parameters in the response body

Parameter	Type	Description
apiVersion	String	API version. The value is fixed at **v1** and cannot be changed.
kind	String	API type. The value is fixed at **Mesh** or **mesh** and cannot be changed.
metadata	**Table 4-65** object	Basic information about the service mesh. Metadata is a collection of attributes.
spec	**Table 4-66** object	Detailed description of the service mesh. ASM creates or updates the service mesh by **spec**.
status	**Table 4-79** object	Service mesh status, which is automatically generated by ASM.

Table 4-65 MeshMetadata

Parameter	Type	Description
name	String	Service mesh name. Enter 4 to 64 characters. The name must start with a lowercase letter and not end with a hyphen (-). Only lowercase letters, digits, and hyphens (-) are allowed.
uid	String	Service mesh ID, which is unique and automatically generated after the service mesh is created.
creationTimestamp	String	Time when the service mesh was created.

Table 4-66 MeshSpec

Parameter	Type	Description
type	String	Service mesh type. **InCluster**: service mesh with an in-cluster control plane. The value is **InCluster** for the service mesh of the Basic edition.
version	String	Service mesh version.
extendParams	**Table 4-67** object	Extensions of the service mesh.
ipv6Enable	Boolean	Whether the service mesh supports IPv6.
config	**Table 4-69** object	Service mesh configuration.

Table 4-67 MeshExtendParams

Parameter	Type	Description
clusters	Array of **Table 4-68** objects	Cluster information in the service mesh.

Table 4-68 MeshCluster

Parameter	Type	Description
clusterID	String	Cluster ID, which is unique and can be used to query the cluster to be added.

Table 4-69 MeshConfig

Parameter	Type	Description
proxyConfig	**Table 4-70** object	Data plane configuration of the service mesh.
telemetryConfig	**Table 4-71** object	Observability configuration of the service mesh.

Table 4-70 ProxyConfig

Parameter	Type	Description
includeIPRanges	String	IP address ranges that will be included for outbound traffic redirection. Use commas (,) to separate the IP address ranges.
excludeIPRanges	String	IP address ranges that will be excluded for outbound traffic redirection. Use commas (,) to separate the IP address ranges.
excludeOutboundPorts	String	Ports that will be excluded for outbound traffic redirection. Use commas (,) to separate the ports.
excludeInboundPorts	String	Ports that will be excluded for inbound traffic redirection. Use commas (,) to separate the ports.
includeOutbound-Ports	String	Ports that will be included for outbound traffic redirection. Use commas (,) to separate the ports.
includeInboundPorts	String	Ports that will be included for inbound traffic redirection. Use commas (,) to separate the ports.

Table 4-71 TelemetryConfig

Parameter	Type	Description
metrics	**Table 4-72** object	Application metric configuration, which is used to report service mesh metrics. To enable this configuration, you need to install the Cloud Native Cluster Monitoring add-on in the cluster.
accessLogging	**Table 4-74** object	Access log configuration, which is used to report access logs of Istio proxies in the service mesh. To enable this configuration, you need to install the Cloud Native Log Collection add-on in the cluster.
tracing	**Table 4-76** object	Tracing configuration, which is used to report traces in the service mesh.

Table 4-72 Metric

Parameter	Type	Description
aom	Array of **Table 4-73** objects	AOM instance configuration.

Table 4-73 Aom

Parameter	Type	Description
instanceID	String	AOM instance ID.

Table 4-74 AccessLogging

Parameter	Type	Description
lts	Array of **Table 4-75** objects	LTS configuration.

Table 4-75 LtsConfig

Parameter	Type	Description
logGroupID	String	Log group ID of access logs.
logStreamID	String	Log stream ID of access logs.

Table 4-76 Tracing

Parameter	Type	Description
randomSamplingPercentage	Float	Tracing sampling rate.
defaultProviders	Array of strings	Name of the default provider that tracing reports data to, which must match the **name** field in **extensionProviders** or use the preset provider **apm-otel** of ASM. If **apm-otel** is used, ensure that APM 2.0 is supported in the current region and the service mesh version is later than 1.18.
extensionProviders	Array of **Table 4-77** objects	User-defined provider. Currently, Zipkin is supported. If you configure the Zipkin provider, ensure that the service mesh version is 1.15 or later.

Table 4-77 TracingExtensionProvider

Parameter	Type	Description
name	String	Provider name.
zipkin	**Table 4-78** object	Self-defined configuration of Zipkin.

Table 4-78 ZipkinTracingProvider

Parameter	Type	Description
service	String	Service address of Zipkin.
port	Integer	Service port of Zipkin.

Table 4-79 MeshStatus

Parameter	Type	Description
phase	String	Service mesh status. The options are as follows: • **Running**: The service mesh is running. • **Creating**: The service mesh is being created. • **CreateFailed**: The service mesh fails to be created. • **Deleting**: The service mesh is being deleted. • **DeleteFailed**: The service mesh fails to be deleted. • **Upgrading**: The service mesh is being upgraded. • **UpgradeFailed**: The service mesh fails to be upgraded. • **RollingBack**: The service mesh is being rolled back. • **RollbackFailed**: The service mesh fails to be rolled back.
updateTimestamp	String	Time when the service mesh was updated.

Status code: 400

Table 4-80 Parameters in the response body

Parameter	Type	Description
errorCode	String	Error code. Minimum length: **8** Maximum length: **36**
errorMsg	String	Error message. Minimum length: **2** Maximum length: **512**

Status code: 404

Table 4-81 Parameters in the response body

Parameter	Type	Description
errorCode	String	Error code. Minimum length: **8** Maximum length: **36**
errorMsg	String	Error message. Minimum length: **2** Maximum length: **512**

Status code: 500

Table 4-82 Parameters in the response body

Parameter	Type	Description
errorCode	String	Error code. Minimum length: **8** Maximum length: **36**
errorMsg	String	Error message. Minimum length: **2** Maximum length: **512**

Example Request

None

Example Response

Status code: 200

The details about the service mesh are obtained.


```
{
  "kind" : "Mesh",
  "apiVersion" : "v1",
  "metadata" : {
    "name" : "mesh-test-api",
    "uid" : "a1efdc3e-xxxx-xxxx-xxxx-94bef433347e",
    "creationTimestamp" : "2025-04-10T07:48:37Z"
  },
  "spec" : {
    "type" : "InCluster",
    "version" : "1.18.7-r5",
    "config" : {
      "telemetryConfig" : {
        "metrics" : {
          "aom" : [ {
            "instanceID" : "602a5b7e-xxxx-xxxx-xxxx-4268c35b0424"
          } ]
```



```
      },
      "accessLogging" : {
        "lts" : [ {
          "logGroupID" : "b884eaeb-xxxx-xxxx-xxxx-f442de73c392",
          "logStreamID" : "362e11e8-xxxx-xxxx-xxxx-0afdc68da7d2"
        } ]
      },
      "tracing" : {
        "randomSamplingPercentage" : 1,
        "defaultProviders" : [ "zipkin" ],
        "extensionProviders" : [ {
          "name" : "zipkin",
          "zipkin" : {
            "service" : "zipkin.monitoring.svc.cluster.local",
            "port" : 9411
          }
        } ]
      }
    },
    "proxyConfig" : {
      "includeIPRanges" : "10.247.0.0/16"
    }
  },
  "extendParams" : {
    "clusters" : [ {
      "clusterID" : "cb0ef541-xxxx-xxxx-xxxx-0255ac1001b7"
    } ]
  }
 },
 "status" : {
  "phase" : "Running",
  "updateTimestamp" : "2025-04-10T07:58:43Z"
 }
}
```


Status Codes

Status Code	Description
200	The details about the service mesh are obtained.
400	Verification failed due to incorrect parameters for obtaining the details about the service mesh.
404	The specified service mesh is not found.
500	An error occurs during the service mesh query.

Error Codes

For details, see **Error Codes**.

4.1.4 Querying the Service Mesh List

Function

This API is used to obtain details about all service meshes.

URI

GET /v1/{project_id}/meshes

Table 4-83 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

Request Parameters

Table 4-84 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Requests for calling an API can be authenticated using either a token or AK/SK. If token-based authentication is used, this parameter is mandatory and must be set to a user token.

Response Parameters

Status code: 200

Table 4-85 Parameters in the response body

Parameter	Type	Description
apiVersion	String	API version. The value is fixed at **v1** and cannot be changed.
kind	String	API type. The value is fixed at **MeshList** and cannot be changed.
items	Array of **Table 4-86** objects	Service mesh list.

Table 4-86 Mesh

Parameter	Type	Description
apiVersion	String	API version. The value is fixed at **v1** and cannot be changed.

Parameter	Type	Description
kind	String	API type. The value is fixed at **Mesh** or **mesh** and cannot be changed.
metadata	**Table 4-87** object	Basic information about the service mesh. Metadata is a collection of attributes.
spec	**Table 4-88** object	Detailed description of the service mesh. ASM creates or updates the service mesh by **spec**.
status	**Table 4-101** object	Service mesh status, which is automatically generated by ASM.

Table 4-87 MeshMetadata

Parameter	Type	Description
name	String	Service mesh name. Enter 4 to 64 characters. The name must start with a lowercase letter and not end with a hyphen (-). Only lowercase letters, digits, and hyphens (-) are allowed.
uid	String	Service mesh ID, which is unique and automatically generated after the service mesh is created.
creationTimestamp	String	Time when the service mesh was created.

Table 4-88 MeshSpec

Parameter	Type	Description
type	String	Service mesh type. **InCluster**: service mesh with an in-cluster control plane. The value is **InCluster** for the service mesh of the Basic edition.
version	String	Service mesh version.
extendParams	**Table 4-89** object	Extensions of the service mesh.
ipv6Enable	Boolean	Whether the service mesh supports IPv6.
config	**Table 4-91** object	Service mesh configuration.

Table 4-89 MeshExtendParams

Parameter	Type	Description
clusters	Array of **Table 4-90** objects	Cluster information in the service mesh.

Table 4-90 MeshCluster

Parameter	Type	Description
clusterID	String	Cluster ID, which is unique and can be used to query the cluster to be added.

Table 4-91 MeshConfig

Parameter	Type	Description
proxyConfig	**Table 4-92** object	Data plane configuration of the service mesh.
telemetryConfig	**Table 4-93** object	Observability configuration of the service mesh.

Table 4-92 ProxyConfig

Parameter	Type	Description
includeIPRanges	String	IP address ranges that will be included for outbound traffic redirection. Use commas (,) to separate the IP address ranges.
excludeIPRanges	String	IP address ranges that will be excluded for outbound traffic redirection. Use commas (,) to separate the IP address ranges.
excludeOutboundPorts	String	Ports that will be excluded for outbound traffic redirection. Use commas (,) to separate the ports.
excludeInboundPorts	String	Ports that will be excluded for inbound traffic redirection. Use commas (,) to separate the ports.
includeOutbound-Ports	String	Ports that will be included for outbound traffic redirection. Use commas (,) to separate the ports.

Parameter	Type	Description
includeInboundPorts	String	Ports that will be included for inbound traffic redirection. Use commas (,) to separate the ports.

Table 4-93 TelemetryConfig

Parameter	Type	Description
metrics	**Table 4-94** object	Application metric configuration, which is used to report service mesh metrics. To enable this configuration, you need to install the Cloud Native Cluster Monitoring add-on in the cluster.
accessLogging	**Table 4-96** object	Access log configuration, which is used to report access logs of Istio proxies in the service mesh. To enable this configuration, you need to install the Cloud Native Log Collection add-on in the cluster.
tracing	**Table 4-98** object	Tracing configuration, which is used to report traces in the service mesh.

Table 4-94 Metric

Parameter	Type	Description
aom	Array of **Table 4-95** objects	AOM instance configuration.

Table 4-95 Aom

Parameter	Type	Description
instanceID	String	AOM instance ID.

Table 4-96 AccessLogging

Parameter	Type	Description
lts	Array of **Table 4-97** objects	LTS configuration.

Table 4-97 LtsConfig

Parameter	Type	Description
logGroupID	String	Log group ID of access logs.
logStreamID	String	Log stream ID of access logs.

Table 4-98 Tracing

Parameter	Type	Description
randomSamplingPercentage	Float	Tracing sampling rate.
defaultProviders	Array of strings	Name of the default provider that tracing reports data to, which must match the **name** field in **extensionProviders** or use the preset provider **apm-otel** of ASM. If **apm-otel** is used, ensure that APM 2.0 is supported in the current region and the service mesh version is later than 1.18.
extensionProviders	Array of **Table 4-99** objects	User-defined provider. Currently, Zipkin is supported. If you configure the Zipkin provider, ensure that the service mesh version is 1.15 or later.

Table 4-99 TracingExtensionProvider

Parameter	Type	Description
name	String	Provider name.
zipkin	**Table 4-100** object	Self-defined configuration of Zipkin.

Table 4-100 ZipkinTracingProvider

Parameter	Type	Description
service	String	Service address of Zipkin.
port	Integer	Service port of Zipkin.

Table 4-101 MeshStatus

Parameter	Type	Description
phase	String	Service mesh status. The options are as follows: • **Running**: The service mesh is running. • **Creating**: The service mesh is being created. • **CreateFailed**: The service mesh fails to be created. • **Deleting**: The service mesh is being deleted. • **DeleteFailed**: The service mesh fails to be deleted. • **Upgrading**: The service mesh is being upgraded. • **UpgradeFailed**: The service mesh fails to be upgraded. • **RollingBack**: The service mesh is being rolled back. • **RollbackFailed**: The service mesh fails to be rolled back.
updateTimestamp	String	Time when the service mesh was updated.

Status code: 400

Table 4-102 Parameters in the response body

Parameter	Type	Description
errorCode	String	Error code. Minimum length: **8** Maximum length: **36**
errorMsg	String	Error message. Minimum length: **2** Maximum length: **512**

Status code: 500

Table 4-103 Parameters in the response body

Parameter	Type	Description
errorCode	String	Error code. Minimum length: **8** Maximum length: **36**
errorMsg	String	Error message. Minimum length: **2** Maximum length: **512**

Example Request

None

Example Response

Status code: 200

The details about all service meshes are obtained.


```
{
  "kind" : "MeshList",
  "apiVersion" : "v1",
  "items" : [ {
    "kind" : "Mesh",
    "apiVersion" : "v1",
    "metadata" : {
      "name" : "mesh-test-api",
      "uid" : "a1efdc3e-xxxx-xxxx-xxxx-94bef433347e",
      "creationTimestamp" : "2025-04-10T07:48:37Z"
    },
    "spec" : {
      "type" : "InCluster",
      "version" : "1.18.7-r5",
      "config" : {
        "telemetryConfig" : {
          "metrics" : {
            "aom" : [ {
              "instanceID" : "602a5b7e-xxxx-xxxx-xxxx-4268c35b0424"
            } ]
          },
          "accessLogging" : {
            "lts" : [ {
              "logGroupID" : "b884eaeb-xxxx-xxxx-xxxx-f442de73c392",
              "logStreamID" : "362e11e8-xxxx-xxxx-xxxx-0afdc68da7d2"
            } ]
          },
          "tracing" : {
            "randomSamplingPercentage" : 1,
            "defaultProviders" : [ "zipkin" ],
            "extensionProviders" : [ {
              "name" : "zipkin",
              "zipkin" : {
                "service" : "zipkin.monitoring.svc.cluster.local",
                "port" : 9411
              }
            } ]
          }
        },
```



```
      "proxyConfig" : {
        "includeIPRanges" : "10.247.0.0/16"
      }
    },
    "extendParams" : {
      "clusters" : [ {
        "clusterID" : "cb0ef541-xxxx-xxxx-xxxx-0255ac1001b7"
      } ]
    }
  },
  "status" : {
    "phase" : "Running",
    "updateTimestamp" : "2025-04-10T07:58:43Z"
  }
 } ]
}
```


Status Codes

Status Code	Description
200	The details about all service meshes are obtained.
400	Verification failed due to incorrect parameters for obtaining the details about all service meshes.
500	An error occurs during the service mesh query.

Error Codes

For details, see **Error Codes**.

5 Appendix

5.1 Status Codes

Table 5-1 describes status codes.

Table 5-1 Status codes

Status Code	Message Title	Description
100	Continue	The client continues sending the request. The server has received the initial part of the request and the client should continue sending the remaining part.
101	Switching Protocols	The protocol should be switched and can only be switched to a more advanced protocol. For example, the current HTTP protocol is switched to a later version.
201	Created	The request for creating a resource has been fulfilled.
202	Accepted	The request has been accepted, but the processing has not been completed.
203	Non-Authoritative Information	The server successfully processed the request, but is returning information that may be from another source.
204	NoContent	The server has successfully processed the request, but is not returning any response body. The status code is returned in response to an HTTP **OPTIONS** request.
205	Reset Content	The server has fulfilled the request, but the requester is required to reset the content.

Status Code	Message Title	Description
206	Partial Content	The server has successfully processed a part of a **GET** request.
300	Multiple Choices	There are multiple options for the requested resource. The response contains a list of resource characteristics and addresses from which the user or user agent (such as a browser) can choose the most appropriate one.
301	Moved Permanently	The requested resource has been assigned a new permanent URI, and the new URI is contained in the response.
302	Found	The requested resource resides temporarily under a different URI.
303	See Other	The response to the request can be found under a different URI. It should be retrieved using a GET or POST method.
304	Not Modified	The requested resource has not been modified. If the server returns this status code, no resource will be returned.
305	Use Proxy	The requested resource must be accessed through a proxy.
306	Unused	The HTTP status code is no longer used.
400	BadRequest	The request is invalid. The client should modify the request instead of re-initiating it.
401	Unauthorized	The authorization information provided by the client is incorrect or invalid.
402	Payment Required	This status code is reserved for future use.
403	Forbidden	The request is denied. The server has received the request and understood it, but the server is refusing to respond to it. The client should not repeat the request without modifications.
404	NotFound	The requested resource could not be found. The client should modify the request instead of re-initiating it.

Status Code	Message Title	Description
405	MethodNotAllowed	The method specified in the request is not supported for the requested resource. The client should modify the request instead of re-initiating it.
406	Not Acceptable	The server cannot fulfill the request based on the content characteristics of the request.
407	Proxy Authentication Required	This status code is similar to 401, but the client must first authenticate itself with the proxy.
408	Request Time-out	The server times out when waiting for the request. The client may repeat the request without modifications at any later time.
409	Conflict	The request could not be completed due to a conflict. The resource that the client attempts to create already exits, or the request fails to be processed because of the update of the conflict request.
410	Gone	The requested resource could not be found. The requested resource has been deleted permanently.
411	Length Required	The server refuses to process the request without a defined **Content-Length**.
412	Precondition Failed	The server does not meet one of the preconditions that the requester puts on the request.
413	Request Entity Too Large	The request is larger than the server is willing or able to process. The server may disable the connection to prevent the client from sending requests consecutively. If the server cannot process the request temporarily, the response will contain a **Retry-After** header field.
414	Request-URI Too Large	The request URI is too long for the server to process.
415	Unsupported Media Type	The server is unable to process the media format in the request.
416	Requested range not satisfiable	The requested range is invalid.

Status Code	Message Title	Description
417	Expectation Failed	The server fails to meet the requirements of the **Expect** request header field.
422	UnprocessableEntity	The request is well-formed but is unable to be processed due to semantic errors.
429	TooManyRequests	The client sends excessive requests to the server within a given time (exceeding the limit on the access frequency of the client), or the server receives excessive requests within a given time (beyond its processing capability). In this case, the client should repeat requests after the time specified in the **Retry-After** header of the response expires.
500	InternalServerError	The server is able to receive the request, but it could not understand the request.
501	Not Implemented	The server does not support the functionality required to fulfill the request.
502	Bad Gateway	The server was acting as a gateway or proxy and received an invalid response from the upstream server.
503	ServiceUnavailable	The requested service is invalid. The client should modify the request instead of re-initiating it.
504	ServerTimeout	The request cannot be fulfilled within a given time. This status code is returned to the client only when the **Timeout** parameter is specified in the request.
505	HTTP Version not supported	The server does not support the HTTP protocol version used in the request.

5.2 Error Codes

If an API fails to be called, no service data will be returned. You can identify the cause based on the error code of each API. If an error occurs in API calling, HTTP status code 4*xx* or 5*xx* will be returned. The response body contains the specific error code and information. If you are unable to identify the cause of an error, contact customer service and provide the error code so that we can help you solve the problem as soon as possible.

Error Response Body Format

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.


```
{
    "errorMsg": Modify the request body based on the returned message and the ASM API documentation, or contact technical support.
    "errorCode": "ASM.01400001"
}
```

In the preceding information, **error_code** indicates an error code, and **error_msg** describes the error.

Error Code Description

If an error code starting with **APIGW** is returned after you call an API, rectify the fault by referring to **Error Codes**.

Table 5-2 Error codes

Status Code	Error Code	Error Message	Description	Troubleshooting
400	ASM.01400001	Invalid request.	The request body is invalid.	Modify the request body based on the returned message and the ASM API documentation, or contact technical support.
401	ASM.01401001	Authorization failed.	The authentication failed.	See the returned message or contact technical support.
403	ASM.01403001	Forbidden.	The access is denied.	See the returned message or contact technical support.
404	ASM.01404001	Resource not found.	The resource is not found.	Check whether the resource to be accessed has been deleted.
409	ASM.01409001	The resource already exists.	The resource already exists.	Delete the resource and try again.
429	ASM.01429001	Resource locked by other requests.	The resource is locked by another request.	See the returned message or contact technical support.

Status Code	Error Code	Error Message	Description	Troubleshooting
500	ASM.01500001	Internal error.	An internal error occurred.	See the returned message or contact technical support.

