



API Reference

# Amazon OpenSearch Serverless



**API Version 2021-11-01**

Copyright © 2024 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

# Amazon OpenSearch Serverless: API Reference

Copyright © 2024 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

Amazon's trademarks and trade dress may not be used in connection with any product or service that is not Amazon's, in any manner that is likely to cause confusion among customers, or in any manner that disparages or discredits Amazon. All other trademarks not owned by Amazon are the property of their respective owners, who may or may not be affiliated with, connected to, or sponsored by Amazon.

# Table of Contents

<b>Welcome .....</b>	<b>1</b>
<b>Actions .....</b>	<b>2</b>
BatchGetCollection .....	4
Request Syntax .....	4
Request Parameters .....	4
Response Syntax .....	5
Response Elements .....	5
Errors .....	6
Examples .....	6
See Also .....	8
BatchGetEffectiveLifecyclePolicy .....	9
Request Syntax .....	9
Request Parameters .....	9
Response Syntax .....	9
Response Elements .....	10
Errors .....	10
See Also .....	11
BatchGetLifecyclePolicy .....	12
Request Syntax .....	12
Request Parameters .....	12
Response Syntax .....	12
Response Elements .....	13
Errors .....	13
See Also .....	14
BatchGetVpcEndpoint .....	15
Request Syntax .....	15
Request Parameters .....	15
Response Syntax .....	15
Response Elements .....	16
Errors .....	16
See Also .....	17
CreateAccessPolicy .....	18
Request Syntax .....	18
Request Parameters .....	18

Response Syntax .....	19
Response Elements .....	20
Errors .....	20
See Also .....	21
CreateCollection .....	22
Request Syntax .....	22
Request Parameters .....	22
Response Syntax .....	24
Response Elements .....	24
Errors .....	24
Examples .....	25
See Also .....	26
CreateLifecyclePolicy .....	28
Request Syntax .....	28
Request Parameters .....	28
Response Syntax .....	29
Response Elements .....	30
Errors .....	30
See Also .....	31
CreateSecurityConfig .....	32
Request Syntax .....	32
Request Parameters .....	32
Response Syntax .....	33
Response Elements .....	34
Errors .....	34
See Also .....	35
CreateSecurityPolicy .....	36
Request Syntax .....	36
Request Parameters .....	36
Response Syntax .....	37
Response Elements .....	38
Errors .....	38
See Also .....	39
CreateVpcEndpoint .....	40
Request Syntax .....	40
Request Parameters .....	40

Response Syntax .....	41
Response Elements .....	42
Errors .....	42
See Also .....	43
DeleteAccessPolicy .....	44
Request Syntax .....	44
Request Parameters .....	44
Response Elements .....	45
Errors .....	45
See Also .....	45
DeleteCollection .....	47
Request Syntax .....	47
Request Parameters .....	47
Response Syntax .....	48
Response Elements .....	48
Errors .....	48
Examples .....	49
See Also .....	50
DeleteLifecyclePolicy .....	51
Request Syntax .....	51
Request Parameters .....	51
Response Elements .....	52
Errors .....	52
See Also .....	52
DeleteSecurityConfig .....	54
Request Syntax .....	54
Request Parameters .....	54
Response Elements .....	54
Errors .....	55
See Also .....	55
DeleteSecurityPolicy .....	57
Request Syntax .....	57
Request Parameters .....	57
Response Elements .....	58
Errors .....	58
See Also .....	58

DeleteVpcEndpoint .....	60
Request Syntax .....	60
Request Parameters .....	60
Response Syntax .....	60
Response Elements .....	61
Errors .....	61
See Also .....	62
GetAccessPolicy .....	63
Request Syntax .....	63
Request Parameters .....	63
Response Syntax .....	63
Response Elements .....	64
Errors .....	64
See Also .....	65
GetAccountSettings .....	66
Response Syntax .....	66
Response Elements .....	66
Errors .....	66
See Also .....	67
GetPoliciesStats .....	68
Response Syntax .....	68
Response Elements .....	68
Errors .....	69
See Also .....	69
GetSecurityConfig .....	71
Request Syntax .....	71
Request Parameters .....	71
Response Syntax .....	71
Response Elements .....	72
Errors .....	72
See Also .....	72
GetSecurityPolicy .....	74
Request Syntax .....	74
Request Parameters .....	74
Response Syntax .....	75
Response Elements .....	75

Errors .....	75
See Also .....	76
ListAccessPolicies .....	77
Request Syntax .....	77
Request Parameters .....	77
Response Syntax .....	78
Response Elements .....	78
Errors .....	79
See Also .....	79
ListCollections .....	81
Request Syntax .....	81
Request Parameters .....	81
Response Syntax .....	82
Response Elements .....	82
Errors .....	83
Examples .....	83
See Also .....	86
ListLifecyclePolicies .....	87
Request Syntax .....	87
Request Parameters .....	87
Response Syntax .....	88
Response Elements .....	88
Errors .....	89
See Also .....	89
ListSecurityConfigs .....	91
Request Syntax .....	91
Request Parameters .....	91
Response Syntax .....	92
Response Elements .....	92
Errors .....	93
See Also .....	93
ListSecurityPolicies .....	94
Request Syntax .....	94
Request Parameters .....	94
Response Syntax .....	95
Response Elements .....	95

Errors .....	96
See Also .....	96
ListTagsForResource .....	97
Request Syntax .....	97
Request Parameters .....	97
Response Syntax .....	97
Response Elements .....	98
Errors .....	98
See Also .....	98
ListVpcEndpoints .....	100
Request Syntax .....	100
Request Parameters .....	100
Response Syntax .....	101
Response Elements .....	101
Errors .....	102
See Also .....	102
TagResource .....	103
Request Syntax .....	103
Request Parameters .....	103
Response Elements .....	104
Errors .....	104
See Also .....	104
UntagResource .....	106
Request Syntax .....	106
Request Parameters .....	106
Response Elements .....	107
Errors .....	107
See Also .....	107
UpdateAccessPolicy .....	109
Request Syntax .....	109
Request Parameters .....	109
Response Syntax .....	111
Response Elements .....	111
Errors .....	111
See Also .....	112
UpdateAccountSettings .....	113



Request Syntax .....	113
Request Parameters .....	113
Response Syntax .....	113
Response Elements .....	114
Errors .....	114
See Also .....	114
UpdateCollection .....	116
Request Syntax .....	116
Request Parameters .....	116
Response Syntax .....	117
Response Elements .....	117
Errors .....	117
See Also .....	118
UpdateLifecyclePolicy .....	119
Request Syntax .....	119
Request Parameters .....	119
Response Syntax .....	121
Response Elements .....	121
Errors .....	121
See Also .....	122
UpdateSecurityConfig .....	123
Request Syntax .....	123
Request Parameters .....	123
Response Syntax .....	124
Response Elements .....	125
Errors .....	125
See Also .....	126
UpdateSecurityPolicy .....	127
Request Syntax .....	127
Request Parameters .....	127
Response Syntax .....	129
Response Elements .....	129
Errors .....	129
See Also .....	130
UpdateVpcEndpoint .....	131
Request Syntax .....	131

Request Parameters .....	131
Response Syntax .....	133
Response Elements .....	133
Errors .....	133
See Also .....	134
<b>Data Types .....</b>	<b>135</b>
AccessPolicyDetail .....	137
Contents .....	137
See Also .....	138
AccessPolicyStats .....	139
Contents .....	139
See Also .....	139
AccessPolicySummary .....	140
Contents .....	140
See Also .....	141
AccountSettingsDetail .....	142
Contents .....	142
See Also .....	142
CapacityLimits .....	143
Contents .....	143
See Also .....	143
CollectionDetail .....	144
Contents .....	144
See Also .....	146
CollectionErrorDetail .....	147
Contents .....	147
See Also .....	148
CollectionFilters .....	149
Contents .....	149
See Also .....	149
CollectionSummary .....	150
Contents .....	150
See Also .....	151
CreateCollectionDetail .....	152
Contents .....	152
See Also .....	154

CreateVpcEndpointDetail .....	155
Contents .....	155
See Also .....	155
DeleteCollectionDetail .....	157
Contents .....	157
See Also .....	157
DeleteVpcEndpointDetail .....	159
Contents .....	159
See Also .....	159
EffectiveLifecyclePolicyDetail .....	161
Contents .....	161
See Also .....	162
EffectiveLifecyclePolicyErrorDetail .....	163
Contents .....	163
See Also .....	163
LifecyclePolicyDetail .....	165
Contents .....	165
See Also .....	166
LifecyclePolicyErrorDetail .....	167
Contents .....	167
See Also .....	168
LifecyclePolicyIdentifier .....	169
Contents .....	169
See Also .....	169
LifecyclePolicyResourceIdentifier .....	170
Contents .....	170
See Also .....	170
LifecyclePolicyStats .....	171
Contents .....	171
See Also .....	171
LifecyclePolicySummary .....	172
Contents .....	172
See Also .....	173
SamlConfigOptions .....	174
Contents .....	174
See Also .....	175

SecurityConfigDetail .....	176
Contents .....	176
See Also .....	177
SecurityConfigStats .....	178
Contents .....	178
See Also .....	178
SecurityConfigSummary .....	179
Contents .....	179
See Also .....	180
SecurityPolicyDetail .....	181
Contents .....	181
See Also .....	182
SecurityPolicyStats .....	183
Contents .....	183
See Also .....	183
SecurityPolicySummary .....	184
Contents .....	184
See Also .....	185
Tag .....	186
Contents .....	186
See Also .....	186
UpdateCollectionDetail .....	187
Contents .....	187
See Also .....	188
UpdateVpcEndpointDetail .....	190
Contents .....	190
See Also .....	191
VpcEndpointDetail .....	192
Contents .....	192
See Also .....	193
VpcEndpointErrorDetail .....	195
Contents .....	195
See Also .....	195
VpcEndpointFilters .....	197
Contents .....	197
See Also .....	197

VpcEndpointSummary .....	198
Contents .....	198
See Also .....	198
<b>Common Parameters .....</b>	<b>200</b>
<b>Common Errors .....</b>	<b>203</b>

# Welcome

Use the Amazon OpenSearch Serverless API to create, configure, and manage OpenSearch Serverless collections and security policies.

OpenSearch Serverless is an on-demand, pre-provisioned serverless configuration for Amazon OpenSearch Service. OpenSearch Serverless removes the operational complexities of provisioning, configuring, and tuning your OpenSearch clusters. It enables you to easily search and analyze petabytes of data without having to worry about the underlying infrastructure and data management.

To learn more about OpenSearch Serverless, see [What is Amazon OpenSearch Serverless?](#)

This document was last published on July 4, 2024.

# Actions

The following actions are supported:

- [BatchGetCollection](#)
- [BatchGetEffectiveLifecyclePolicy](#)
- [BatchGetLifecyclePolicy](#)
- [BatchGetVpcEndpoint](#)
- [CreateAccessPolicy](#)
- [CreateCollection](#)
- [CreateLifecyclePolicy](#)
- [CreateSecurityConfig](#)
- [CreateSecurityPolicy](#)
- [CreateVpcEndpoint](#)
- [DeleteAccessPolicy](#)
- [DeleteCollection](#)
- [DeleteLifecyclePolicy](#)
- [DeleteSecurityConfig](#)
- [DeleteSecurityPolicy](#)
- [DeleteVpcEndpoint](#)
- [GetAccessPolicy](#)
- [GetAccountSettings](#)
- [GetPoliciesStats](#)
- [GetSecurityConfig](#)
- [GetSecurityPolicy](#)
- [ListAccessPolicies](#)
- [ListCollections](#)
- [ListLifecyclePolicies](#)
- [ListSecurityConfigs](#)
- [ListSecurityPolicies](#)
- [ListTagsForResource](#)

- [ListVpcEndpoints](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateAccessPolicy](#)
- [UpdateAccountSettings](#)
- [UpdateCollection](#)
- [UpdateLifecyclePolicy](#)
- [UpdateSecurityConfig](#)
- [UpdateSecurityPolicy](#)
- [UpdateVpcEndpoint](#)



# BatchGetCollection

Returns attributes for one or more collections, including the collection endpoint and the OpenSearch Dashboards endpoint. For more information, see [Creating and managing Amazon OpenSearch Serverless collections](#).

## Request Syntax

```
{
  "ids": [ "string" ],
  "names": [ "string" ]
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### ids

A list of collection IDs. You can't provide names and IDs in the same request. The ID is part of the collection endpoint. You can also retrieve it using the [ListCollections](#) API.

Type: Array of strings

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

Length Constraints: Minimum length of 3. Maximum length of 40.

Pattern: `^[a-z0-9]{3,40}$`

Required: No

### names

A list of collection names. You can't provide names and IDs in the same request.

Type: Array of strings

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

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

## Response Syntax

```
{
  "collectionDetails": [
    {
      "arn": "string",
      "collectionEndpoint": "string",
      "createdDate": number,
      "dashboardEndpoint": "string",
      "description": "string",
      "id": "string",
      "kmsKeyArn": "string",
      "lastModifiedDate": number,
      "name": "string",
      "standbyReplicas": "string",
      "status": "string",
      "type": "string"
    }
  ],
  "collectionErrorDetails": [
    {
      "errorCode": "string",
      "errorMessage": "string",
      "id": "string",
      "name": "string"
    }
  ]
}
```

## Response Elements

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

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

### collectionDetails

Details about each collection.

Type: Array of [CollectionDetail](#) objects

### [collectionErrorDetails](#)

Error information for the request.

Type: Array of [CollectionErrorDetail](#) objects

## Errors

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

### InternalServerError

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## Examples

### Retrieve attributes from multiple collections

The following example requests attributes from two different collections.

#### Sample Request

```
POST / HTTP/1.1
Host: aoss.<region>.<domain>
Accept-Encoding: identity
Content-Length: <PayloadSizeBytes>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.0
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=<Headers>,
  Signature=<Signature>
X-Amz-Date: <Date>
X-Amz-Target: OpenSearchServerless.BatchGetCollection
```

```
{
  "ids": ["1iu5usc4adj5", "1iu5usc4rame"]
}
```

## Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
x-amz-crc32: <Checksum>
Content-Type: application/x-amz-json-1.0
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "collectionDetails": [
    {
      "arn": "arn:aws:aoss:us-east-1:123456789012:collection/07tjusf2h91cunochc",
      "collectionEndpoint": "https://07tjusf2h91cunochc.us-east-1.aoss.amazonaws.com",
      "createdDate": 1655422947204,
      "lastModifiedDate": 1655422947204,
      "dashboardEndpoint": "https://07tjusf2h91cunochc.us-east-1.aoss.amazonaws.com/_dashboards",
      "kmsKeyArn": "arn:aws:kms:us-east-1:123456789012:key/1234abcd-12ab-34cd-56ef-1234567890ab",
      "type": "TIMESERIES",
      "description": "Log data",
      "id": "07tjusf2h91cunochc",
      "name": "my-collection",
      "status": "ACTIVE"
    },
    {
      "id": "178ukvtg3i82dvopdid",
      "name": "another-collection",
      "status": "CREATING",
      "type": "TIMESERIES",
      "description": "",
      "arn": "arn:aws:aoss:us-east-1:123456789012:collection/178ukvtg3i82dvopdid",
      "kmsKeyArn": "arn:aws:kms:us-east-1:123456789012:key/1234abcd-12ab-34cd-56ef-1234567890ab",
      "createdDate": 1667446262828,
      "lastModifiedDate": 1667446300769,
```

```
        "collectionEndpoint": "https://178ukvtg3i82dvopdid.us-east-1.aoss.amazonaws.com",
        "dashboardEndpoint": "https://178ukvtg3i82dvopdid.us-east-1.aoss.amazonaws.com/_dashboards"
    }
],
"collectionErrorDetails": []
}
```

## See Also

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

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

# BatchGetEffectiveLifecyclePolicy

Returns a list of successful and failed retrievals for the OpenSearch Serverless indexes. For more information, see [Viewing data lifecycle policies](#).

## Request Syntax

```
{
  "resourceIdentifiers": [
    {
      "resource": "string",
      "type": "string"
    }
  ]
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [resourceIdentifiers](#)

The unique identifiers of policy types and resource names.

Type: Array of [LifecyclePolicyResourceIdentifier](#) objects

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

Required: Yes

## Response Syntax

```
{
  "effectiveLifecyclePolicyDetails": [
    {
      "noMinRetentionPeriod": boolean,
      "policyName": "string",
      "resource": "string",

```

```
    "resourceType": "string",
    "retentionPeriod": "string",
    "type": "string"
  },
  ],
  "effectiveLifecyclePolicyErrorDetails": [
    {
      "errorCode": "string",
      "errorMessage": "string",
      "resource": "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.

### effectiveLifecyclePolicyDetails

A list of lifecycle policies applied to the OpenSearch Serverless indexes.

Type: Array of [EffectiveLifecyclePolicyDetail](#) objects

### effectiveLifecyclePolicyErrorDetails

A list of resources for which retrieval failed.

Type: Array of [EffectiveLifecyclePolicyErrorDetail](#) objects

## Errors

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

### InternalServerError

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

## ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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



# BatchGetLifecyclePolicy

Returns one or more configured OpenSearch Serverless lifecycle policies. For more information, see [Viewing data lifecycle policies](#).

## Request Syntax

```
{
  "identifiers": [
    {
      "name": "string",
      "type": "string"
    }
  ]
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### identifiers

The unique identifiers of policy types and policy names.

Type: Array of [LifecyclePolicyIdentifier](#) objects

Array Members: Minimum number of 1 item. Maximum number of 40 items.

Required: Yes

## Response Syntax

```
{
  "lifecyclePolicyDetails": [
    {
      "createdDate": number,
      "description": "string",
      "lastModifiedDate": number,

```

```
    "name": "string",
    "policy": JSON value,
    "policyVersion": "string",
    "type": "string"
  }
],
"lifecyclePolicyErrorDetails": [
  {
    "errorCode": "string",
    "errorMessage": "string",
    "name": "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.

### [lifecyclePolicyDetails](#)

A list of lifecycle policies matched to the input policy name and policy type.

Type: Array of [LifecyclePolicyDetail](#) objects

### [lifecyclePolicyErrorDetails](#)

A list of lifecycle policy names and policy types for which retrieval failed.

Type: Array of [LifecyclePolicyErrorDetail](#) objects

## Errors

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

### **InternalServerError**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

## ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# BatchGetVpcEndpoint

Returns attributes for one or more VPC endpoints associated with the current account. For more information, see [Access Amazon OpenSearch Serverless using an interface endpoint](#).

## Request Syntax

```
{
  "ids": [ "string" ]
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### ids

A list of VPC endpoint identifiers.

Type: Array of strings

Array Members: Minimum number of 1 item.

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

Pattern: ^vpce-[0-9a-z]\*\$

Required: Yes

## Response Syntax

```
{
  "vpcEndpointDetails": [
    {
      "createdDate": number,
      "id": "string",
      "name": "string",
      "securityGroupIds": [ "string" ],
      "status": "string",

```

```
    "subnetIds": [ "string" ],
    "vpcId": "string"
  },
],
"vpcEndpointErrorDetails": [
  {
    "errorCode": "string",
    "errorMessage": "string",
    "id": "string"
  }
]
```

## Response Elements

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

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

### vpcEndpointDetails

Details about the specified VPC endpoint.

Type: Array of [VpcEndpointDetail](#) objects

### vpcEndpointErrorDetails

Error information for a failed request.

Type: Array of [VpcEndpointErrorDetail](#) objects

## Errors

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

### InternalServerError

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

## HTTP Status Code: 400

### See Also

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

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

# CreateAccessPolicy

Creates a data access policy for OpenSearch Serverless. Access policies limit access to collections and the resources within them, and allow a user to access that data irrespective of the access mechanism or network source. For more information, see [Data access control for Amazon OpenSearch Serverless](#).

## Request Syntax

```
{  
  "clientToken": "string",  
  "description": "string",  
  "name": "string",  
  "policy": "string",  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [clientToken](#)

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### [description](#)

A description of the policy. Typically used to store information about the permissions defined in the policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

### name

The name of the policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

### policy

The JSON policy document to use as the content for the policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20480.

Pattern: `[\u0009\u000A\u000D\u0020-\u007E\u00A1-\u00FF]+`

Required: Yes

### type

The type of policy.

Type: String

Valid Values: data

Required: Yes

## Response Syntax

```
{
  "accessPolicyDetail": {
    "createdDate": number,
    "description": "string",
    "lastModifiedDate": number,
    "name": "string",
```



```
"policy": JSON value,  
"policyVersion": "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.

### [accessPolicyDetail](#)

Details about the created access policy.

Type: [AccessPolicyDetail](#) object

## Errors

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

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ServiceQuotaExceededException**

Thrown when you attempt to create more resources than the service allows based on service quotas.

HTTP Status Code: 400

## ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# CreateCollection

Creates a new OpenSearch Serverless collection. For more information, see [Creating and managing Amazon OpenSearch Serverless collections](#).

## Request Syntax

```
{
  "clientToken": "string",
  "description": "string",
  "name": "string",
  "standbyReplicas": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "type": "string"
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### clientToken

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### description

Description of the collection.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

### name

Name of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

### standbyReplicas

Indicates whether standby replicas should be used for a collection.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

### tags

An arbitrary set of tags (key–value pairs) to associate with the OpenSearch Serverless collection.

Type: Array of [Tag](#) objects

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Required: No

### type

The type of collection.

Type: String

Valid Values: SEARCH | TIMESERIES | VECTORSEARCH

Required: No

## Response Syntax

```
{
  "createCollectionDetail": {
    "arn": "string",
    "createdDate": number,
    "description": "string",
    "id": "string",
    "kmsKeyArn": "string",
    "lastModifiedDate": number,
    "name": "string",
    "standbyReplicas": "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.

### [createCollectionDetail](#)

Details about the collection.

Type: [CreateCollectionDetail](#) object

## Errors

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

### ConflictException

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

## InternalServerError

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

## OcuLimitExceededException

Thrown when the collection you're attempting to create results in a number of search or indexing OCUs that exceeds the account limit.

HTTP Status Code: 400

## ServiceQuotaExceededException

Thrown when you attempt to create more resources than the service allows based on service quotas.

HTTP Status Code: 400

## ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## Examples

### Create a collection

The following example creates a collection.

### Sample Request

```
POST / HTTP/1.1
Host: aoss.<region>.<domain>
Accept-Encoding: identity
Content-Length: <PayloadSizeBytes>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.0
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=<Headers>,
  Signature=<Signature>
X-Amz-Date: <Date>
X-Amz-Target: OpenSearchServerless.CreateCollection
```

```
{
  "name": "my-collection-name",
  "description": "collection-description",
  "clientToken": "f576fe66-8dd5-11ec-b909-0242ac120004",
  "type": "SEARCH"
}
```

## Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
x-amz-crc32: <Checksum>
Content-Type: application/x-amz-json-1.0
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "createCollectionDetail":{
    "arn":"arn:aws:aoss:us-east-1:123456789012:collection/07tjusf2h91cunochc",
    "createdDate":1637012666117,
    "description":"collection-description",
    "kmsKeyArn": "auto",
    "type": "SEARCH",
    "id":"07tjusf2h91cunochc",
    "name":"my-collection-name",
    "status":"CREATING"
  }
}
```

## See Also

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

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

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



# CreateLifecyclePolicy

Creates a lifecycle policy to be applied to OpenSearch Serverless indexes. Lifecycle policies define the number of days or hours to retain the data on an OpenSearch Serverless index. For more information, see [Creating data lifecycle policies](#).

## Request Syntax

```
{  
  "clientToken": "string",  
  "description": "string",  
  "name": "string",  
  "policy": "string",  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [clientToken](#)

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### [description](#)

A description of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

### name

The name of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

### policy

The JSON policy document to use as the content for the lifecycle policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20480.

Pattern: `[\u0009\u000A\u000D\u0020-\u007E\u00A1-\u00FF]+`

Required: Yes

### type

The type of lifecycle policy.

Type: String

Valid Values: `retention`

Required: Yes

## Response Syntax

```
{
  "lifecyclePolicyDetail": {
    "createdDate": number,
    "description": "string",
    "lastModifiedDate": number,
    "name": "string",
    "policy": JSON value,
    "policyVersion": "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.

### [lifecyclePolicyDetail](#)

Details about the created lifecycle policy.

Type: [LifecyclePolicyDetail](#) object

## Errors

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

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerError**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ServiceQuotaExceededException**

Thrown when you attempt to create more resources than the service allows based on service quotas.

HTTP Status Code: 400

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

## HTTP Status Code: 400

## See Also

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

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

# CreateSecurityConfig

Specifies a security configuration for OpenSearch Serverless. For more information, see [SAML authentication for Amazon OpenSearch Serverless](#).

## Request Syntax

```
{
  "clientToken": "string",
  "description": "string",
  "name": "string",
  "samlOptions": {
    "groupAttribute": "string",
    "metadata": "string",
    "sessionTimeout": number,
    "userAttribute": "string"
  },
  "type": "string"
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### clientToken

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### description

A description of the security configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000.

Required: No

### name

The name of the security configuration.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

### samlOptions

Describes SAML options in in the form of a key-value map. This field is required if you specify `saml` for the `type` parameter.

Type: [SamlConfigOptions](#) object

Required: No

### type

The type of security configuration.

Type: String

Valid Values: `saml`

Required: Yes

## Response Syntax

```
{
  "securityConfigDetail": {
    "configVersion": "string",
    "createdDate": number,
    "description": "string",
    "id": "string",
    "lastModifiedDate": number,
    "samlOptions": {
      "groupAttribute": "string",
```

```
    "metadata": "string",  
    "sessionTimeout": number,  
    "userAttribute": "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.

### securityConfigDetail

Details about the created security configuration.

Type: [SecurityConfigDetail](#) object

## Errors

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

### ConflictException

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### InternalServerErrorException

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### ServiceQuotaExceededException

Thrown when you attempt to create more resources than the service allows based on service quotas.

HTTP Status Code: 400

## **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## **See Also**

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

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



# CreateSecurityPolicy

Creates a security policy to be used by one or more OpenSearch Serverless collections. Security policies provide access to a collection and its OpenSearch Dashboards endpoint from public networks or specific VPC endpoints. They also allow you to secure a collection with a KMS encryption key. For more information, see [Network access for Amazon OpenSearch Serverless](#) and [Encryption at rest for Amazon OpenSearch Serverless](#).

## Request Syntax

```
{  
  "clientToken": "string",  
  "description": "string",  
  "name": "string",  
  "policy": "string",  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [clientToken](#)

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### [description](#)

A description of the policy. Typically used to store information about the permissions defined in the policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

### name

The name of the policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

### policy

The JSON policy document to use as the content for the new policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20480.

Pattern: `[\u0009\u000A\u000D\u0020-\u007E\u00A1-\u00FF]+`

Required: Yes

### type

The type of security policy.

Type: String

Valid Values: `encryption` | `network`

Required: Yes

## Response Syntax

```
{
  "securityPolicyDetail": {
    "createdDate": number,
    "description": "string",
    "lastModifiedDate": number,
    "name": "string",
```

```
"policy": JSON value,  
"policyVersion": "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.

### securityPolicyDetail

Details about the created security policy.

Type: [SecurityPolicyDetail](#) object

## Errors

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

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ServiceQuotaExceededException**

Thrown when you attempt to create more resources than the service allows based on service quotas.

HTTP Status Code: 400

## ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# CreateVpcEndpoint

Creates an OpenSearch Serverless-managed interface VPC endpoint. For more information, see [Access Amazon OpenSearch Serverless using an interface endpoint](#).

## Request Syntax

```
{
  "clientToken": "string",
  "name": "string",
  "securityGroupIds": [ "string" ],
  "subnetIds": [ "string" ],
  "vpcId": "string"
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### clientToken

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### name

The name of the interface endpoint.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

## securityGroupIds

The unique identifiers of the security groups that define the ports, protocols, and sources for inbound traffic that you are authorizing into your endpoint.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

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

Pattern: `^[\w+\-]+$`

Required: No

## subnetIds

The ID of one or more subnets from which you'll access OpenSearch Serverless.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 6 items.

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^subnet-([0-9a-f]{8}|[0-9a-f]{17})$`

Required: Yes

## vpcId

The ID of the VPC from which you'll access OpenSearch Serverless.

Type: String

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

Pattern: `^vpc-[0-9a-z]*$`

Required: Yes

## Response Syntax

```
{
```

```
"createVpcEndpointDetail": {  
  "id": "string",  
  "name": "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.

### createVpcEndpointDetail

Details about the created interface VPC endpoint.

Type: [CreateVpcEndpointDetail](#) object

## Errors

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

### ConflictException

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### InternalServerError

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### ServiceQuotaExceededException

Thrown when you attempt to create more resources than the service allows based on service quotas.

HTTP Status Code: 400

## ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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



# DeleteAccessPolicy

Deletes an OpenSearch Serverless access policy. For more information, see [Data access control for Amazon OpenSearch Serverless](#).

## Request Syntax

```
{  
  "clientToken": "string",  
  "name": "string",  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [clientToken](#)

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### [name](#)

The name of the policy to delete.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

### [type](#)

The type of policy.

Type: String

Valid Values: data

Required: Yes

## 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](#).

### ConflictException

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### InternalServerErrorException

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### ResourceNotFoundException

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# DeleteCollection

Deletes an OpenSearch Serverless collection. For more information, see [Creating and managing Amazon OpenSearch Serverless collections](#).

## Request Syntax

```
{  
  "clientToken": "string",  
  "id": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### clientToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### id

The unique identifier of the collection. For example, 1iu5usc406kd. The ID is part of the collection endpoint. You can also retrieve it using the [ListCollections](#) API.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 40.

Pattern: `^[a-z0-9]{3,40}$`

Required: Yes

## Response Syntax

```
{
  "deleteCollectionDetail": {
    "id": "string",
    "name": "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.

### deleteCollectionDetail

Details of the deleted collection.

Type: [DeleteCollectionDetail](#) object

## Errors

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

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

## ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## Examples

### Delete a collection

The following example deletes a collection.

#### Sample Request

```
POST / HTTP/1.1
Host: aoss.<region>.<domain>
Accept-Encoding: identity
Content-Length: <PayloadSizeBytes>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.0
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=<Headers>,
  Signature=<Signature>
X-Amz-Date: <Date>
X-Amz-Target: OpenSearchServerless.DeleteCollection

{
  "id": "07tjusf2h91cunochc",
  "clientToken": "f576fe66-8dd5-11ec-b909-0242ac120004"
}
```

#### Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
x-amz-crc32: <Checksum>
Content-Type: application/x-amz-json-1.0
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
  "deleteCollectionDetail":{
```

```
    "id": "07tjusf2h91cunochc",  
    "name": "my-collection",  
    "status": "DELETING"  
  }  
}
```

## See Also

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

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

# DeleteLifecyclePolicy

Deletes an OpenSearch Serverless lifecycle policy. For more information, see [Deleting data lifecycle policies](#).

## Request Syntax

```
{
  "clientToken": "string",
  "name": "string",
  "type": "string"
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### clientToken

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### name

The name of the policy to delete.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

### type

The type of lifecycle policy.



Type: String

Valid Values: retention

Required: Yes

## 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](#).

### ConflictException

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### InternalServerErrorException

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### ResourceNotFoundException

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# DeleteSecurityConfig

Deletes a security configuration for OpenSearch Serverless. For more information, see [SAML authentication for Amazon OpenSearch Serverless](#).

## Request Syntax

```
{  
  "clientToken": "string",  
  "id": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### clientToken

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### id

The security configuration identifier. For SAML the ID will be `saml/<accountId>/<idpProviderName>`. For example, `saml/123456789123/OKTADev`.

Type: String

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

Required: Yes

## 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](#).

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

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

# DeleteSecurityPolicy

Deletes an OpenSearch Serverless security policy.

## Request Syntax

```
{  
  "clientToken": "string",  
  "name": "string",  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### clientToken

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### name

The name of the policy to delete.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

### type

The type of policy.

Type: String

Valid Values: encryption | network

Required: Yes

## 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](#).

### ConflictException

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### InternalServerErrorException

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### ResourceNotFoundException

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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



# DeleteVpcEndpoint

Deletes an OpenSearch Serverless-managed interface endpoint. For more information, see [Access Amazon OpenSearch Serverless using an interface endpoint](#).

## Request Syntax

```
{  
  "clientToken": "string",  
  "id": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### clientToken

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### id

The VPC endpoint identifier.

Type: String

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

Pattern: ^vpce-[0-9a-z]\*\$

Required: Yes

## Response Syntax

```
{
```

```
"deleteVpcEndpointDetail": {  
  "id": "string",  
  "name": "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.

### deleteVpcEndpointDetail

Details about the deleted endpoint.

Type: [DeleteVpcEndpointDetail](#) object

## Errors

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

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

## ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# GetAccessPolicy

Returns an OpenSearch Serverless access policy. For more information, see [Data access control for Amazon OpenSearch Serverless](#).

## Request Syntax

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

## Request Parameters

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

The request accepts the following data in JSON format.

### name

The name of the access policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

### type

Type type of policy. Currently, the only supported value is data.

Type: String

Valid Values: data

Required: Yes

## Response Syntax

```
{
```

```
"accessPolicyDetail": {  
  "createdDate": number,  
  "description": "string",  
  "lastModifiedDate": number,  
  "name": "string",  
  "policy": JSON value,  
  "policyVersion": "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.

### accessPolicyDetail

Details about the requested access policy.

Type: [AccessPolicyDetail](#) object

## Errors

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

### **InternalServerError**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# GetAccountSettings

Returns account-level settings related to OpenSearch Serverless.

## Response Syntax

```
{
  "accountSettingsDetail": {
    "capacityLimits": {
      "maxIndexingCapacityInOCU": number,
      "maxSearchCapacityInOCU": 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.

### accountSettingsDetail

OpenSearch Serverless-related details for the current account.

Type: [AccountSettingsDetail](#) object

## Errors

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

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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



# GetPoliciesStats

Returns statistical information about your OpenSearch Serverless access policies, security configurations, and security policies.

## Response Syntax

```
{
  "AccessPolicyStats": {
    "DataPolicyCount": number
  },
  "LifecyclePolicyStats": {
    "RetentionPolicyCount": number
  },
  "SecurityConfigStats": {
    "SamlConfigCount": number
  },
  "SecurityPolicyStats": {
    "EncryptionPolicyCount": number,
    "NetworkPolicyCount": number
  },
  "TotalPolicyCount": 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.

### AccessPolicyStats

Information about the data access policies in your account.

Type: [AccessPolicyStats](#) object

### LifecyclePolicyStats

Information about the lifecycle policies in your account.

Type: [LifecyclePolicyStats](#) object

## [SecurityConfigStats](#)

Information about the security configurations in your account.

Type: [SecurityConfigStats](#) object

## [SecurityPolicyStats](#)

Information about the security policies in your account.

Type: [SecurityPolicyStats](#) object

## [TotalPolicyCount](#)

The total number of OpenSearch Serverless security policies and configurations in your account.

Type: Long

## Errors

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

### InternalServerError

Thrown when an error internal to the service occurs while processing a request.

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

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

# GetSecurityConfig

Returns information about an OpenSearch Serverless security configuration. For more information, see [SAML authentication for Amazon OpenSearch Serverless](#).

## Request Syntax

```
{  
  "id": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### id

The unique identifier of the security configuration.

Type: String

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

Required: Yes

## Response Syntax

```
{  
  "securityConfigDetail": {  
    "configVersion": "string",  
    "createdDate": number,  
    "description": "string",  
    "id": "string",  
    "lastModifiedDate": number,  
    "samlOptions": {  
      "groupAttribute": "string",  
      "metadata": "string",  
      "sessionTimeout": number,  
      "userAttribute": "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.

### securityConfigDetail

Details of the requested security configuration.

Type: [SecurityConfigDetail](#) object

## Errors

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

### InternalServerError

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### ResourceNotFoundException

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# GetSecurityPolicy

Returns information about a configured OpenSearch Serverless security policy. For more information, see [Network access for Amazon OpenSearch Serverless](#) and [Encryption at rest for Amazon OpenSearch Serverless](#).

## Request Syntax

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

## Request Parameters

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

The request accepts the following data in JSON format.

### name

The name of the security policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

### type

The type of security policy.

Type: String

Valid Values: `encryption` | `network`

Required: Yes

## Response Syntax

```
{
  "securityPolicyDetail": {
    "createdDate": number,
    "description": "string",
    "lastModifiedDate": number,
    "name": "string",
    "policy": JSON value,
    "policyVersion": "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.

### securityPolicyDetail

Details about the requested security policy.

Type: [SecurityPolicyDetail](#) object

## Errors

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

### **InternalServerError**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400



## ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# ListAccessPolicies

Returns information about a list of OpenSearch Serverless access policies.

## Request Syntax

```
{  
  "maxResults": number,  
  "nextToken": "string",  
  "resource": [ "string" ],  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [maxResults](#)

An optional parameter that specifies the maximum number of results to return. You can use `nextToken` to get the next page of results. The default is 20.

Type: Integer

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

Required: No

### [nextToken](#)

If your initial `ListAccessPolicies` operation returns a `nextToken`, you can include the returned `nextToken` in subsequent `ListAccessPolicies` operations, which returns results in the next page.

Type: String

Required: No

### [resource](#)

Resource filters (can be collections or indexes) that policies can apply to.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 1000 items.

Required: No

### type

The type of access policy.

Type: String

Valid Values: data

Required: Yes

## Response Syntax

```
{
  "accessPolicySummaries": [
    {
      "createdDate": number,
      "description": "string",
      "lastModifiedDate": number,
      "name": "string",
      "policyVersion": "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.

### accessPolicySummaries

Details about the requested access policies.

Type: Array of [AccessPolicySummary](#) objects

## **nextToken**

When `nextToken` is returned, there are more results available. The value of `nextToken` is a unique pagination token for each page. Make the call again using the returned token to retrieve the next page.

Type: String

## **Errors**

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

### **InternalServerError**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## **See Also**

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

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



# ListCollections

Lists all OpenSearch Serverless collections. For more information, see [Creating and managing Amazon OpenSearch Serverless collections](#).

## Note

Make sure to include an empty request body {} if you don't include any collection filters in the request.

## Request Syntax

```
{
  "collectionFilters": {
    "name": "string",
    "status": "string"
  },
  "maxResults": number,
  "nextToken": "string"
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### collectionFilters

A list of filter names and values that you can use for requests.

Type: [CollectionFilters](#) object

Required: No

### maxResults

The maximum number of results to return. Default is 20. You can use nextToken to get the next page of results.

Type: Integer

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

Required: No

### [nextToken](#)

If your initial `ListCollections` operation returns a `nextToken`, you can include the returned `nextToken` in subsequent `ListCollections` operations, which returns results in the next page.

Type: String

Required: No

## Response Syntax

```
{
  "collectionSummaries": [
    {
      "arn": "string",
      "id": "string",
      "name": "string",
      "status": "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.

### [collectionSummaries](#)

Details about each collection.

Type: Array of [CollectionSummary](#) objects

## **nextToken**

When `nextToken` is returned, there are more results available. The value of `nextToken` is a unique pagination token for each page. Make the call again using the returned token to retrieve the next page.

Type: String

## **Errors**

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

### **InternalServerError**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## **Examples**

### **Retrieve all collections**

The following example lists all collections.

#### **Sample Request**

```
POST / HTTP/1.1
Host: aoss.<region>.<domain>
Accept-Encoding: identity
Content-Length: <PayloadSizeBytes>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.0
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=<Headers>,
  Signature=<Signature>
X-Amz-Date: <Date>
```



```
X-Amz-Target: OpenSearchServerless.ListCollections
{}
```

## Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
x-amz-crc32: <Checksum>
Content-Type: application/x-amz-json-1.0
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "collectionSummaries": [
    {
      "arn": "arn:aws:aoss:us-east-1:123456789012:collection/07tjusf2h91cunochc",
      "id": "07tjusf2h91cunochc",
      "name": "collection-1",
      "status": "ACTIVE"
    },
    {
      "arn": "arn:aws:aoss:us-east-1:123456789012:collection/63hf8klid6904sfcvb",
      "id": "63hf8klid6904sfcvb",
      "name": "collection-2",
      "status": "FAILED"
    },
    {
      "arn": "arn:aws:aoss:us-east-1:123456789012:collection/lo0p4fgjs6fbc87ads",
      "id": "lo0p4fgjs6fbc87ads",
      "name": "collection-3",
      "status": "ACTIVE"
    },
    {
      "arn": "arn:aws:aoss:us-east-1:123456789012:collection/12hd79jbckl6dh4d89",
      "id": "12hd79jbckl6dh4d89",
      "name": "collection-4",
      "status": "DELETING"
    },
    {
      "arn": "arn:aws:aoss:us-east-1:123456789012:collection/17dg8kiybd96dvnd8s",
      "id": "17dg8kiybd96dvnd8s",
      "name": "collection-5",
      "status": "CREATING"
    }
  ]
}
```

```
    ],  
    "nextToken": "MWl1NXVzYzQ0b25q"  
}
```

## Retrieve a subset of collections

The following example lists collections with a status of ACTIVE.

### Sample Request

```
POST / HTTP/1.1  
Host: aoss.<region>.<domain>  
Accept-Encoding: identity  
Content-Length: <PayloadSizeBytes>  
User-Agent: <UserAgentString>  
Content-Type: application/x-amz-json-1.0  
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>, SignedHeaders=<Headers>,  
    Signature=<Signature>  
X-Amz-Date: <Date>  
X-Amz-Target: OpenSearchServerless.ListCollections  
{  
    "collectionFilters": {  
        "status": "ACTIVE"  
    }  
}
```

### Sample Response

```
HTTP/1.1 200 OK  
x-amzn-RequestId: <RequestId>  
x-amz-crc32: <Checksum>  
Content-Type: application/x-amz-json-1.0  
Content-Length: <PayloadSizeBytes>  
Date: <Date>  
{  
    "collectionSummaries": [  
        {  
            "arn": "arn:aws:aoss:us-east-1:123456789012:collection/07tjusf2h91cunochc",  
            "id": "07tjusf2h91cunochc",  
            "name": "collection-1",  
            "status": "ACTIVE"  
        },  
        {
```

```
        "arn": "arn:aws:aoss:us-east-1:123456789012:collection/lo0p4fgjs6fbc87ads",
        "id": "lo0p4fgjs6fbc87ads",
        "name": "collection-3",
        "status": "ACTIVE"
    }
],
"nextToken": "MW11NXVzYzQ0b25q"
}
```

## See Also

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

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

# ListLifecyclePolicies

Returns a list of OpenSearch Serverless lifecycle policies. For more information, see [Viewing data lifecycle policies](#).

## Request Syntax

```
{  
  "maxResults": number,  
  "nextToken": "string",  
  "resources": [ "string" ],  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [maxResults](#)

An optional parameter that specifies the maximum number of results to return. You can use `nextToken` to get the next page of results. The default is 10.

Type: Integer

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

Required: No

### [nextToken](#)

If your initial `ListLifecyclePolicies` operation returns a `nextToken`, you can include the returned `nextToken` in subsequent `ListLifecyclePolicies` operations, which returns results in the next page.

Type: String

Required: No

### [resources](#)

Resource filters that policies can apply to. Currently, the only supported resource type is `index`.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 1000 items.

Required: No

### type

The type of lifecycle policy.

Type: String

Valid Values: `retention`

Required: Yes

## Response Syntax

```
{
  "lifecyclePolicySummaries": [
    {
      "createdDate": number,
      "description": "string",
      "lastModifiedDate": number,
      "name": "string",
      "policyVersion": "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.

### [lifecyclePolicySummaries](#)

Details about the requested lifecycle policies.

Type: Array of [LifecyclePolicySummary](#) objects

## **nextToken**

When `nextToken` is returned, there are more results available. The value of `nextToken` is a unique pagination token for each page. Make the call again using the returned token to retrieve the next page.

Type: String

## **Errors**

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

### **InternalServerError**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## **See Also**

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

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



# ListSecurityConfigs

Returns information about configured OpenSearch Serverless security configurations. For more information, see [SAML authentication for Amazon OpenSearch Serverless](#).

## Request Syntax

```
{  
  "maxResults": number,  
  "nextToken": "string",  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### maxResults

An optional parameter that specifies the maximum number of results to return. You can use nextToken to get the next page of results. The default is 20.

Type: Integer

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

Required: No

### nextToken

If your initial ListSecurityConfigs operation returns a nextToken, you can include the returned nextToken in subsequent ListSecurityConfigs operations, which returns results in the next page.

Type: String

Required: No

### type

The type of security configuration.



Type: String

Valid Values: sam1

Required: Yes

## Response Syntax

```
{
  "nextToken": "string",
  "securityConfigSummaries": [
    {
      "configVersion": "string",
      "createdDate": number,
      "description": "string",
      "id": "string",
      "lastModifiedDate": number,
      "type": "string"
    }
  ]
}
```

## Response Elements

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

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

### nextToken

When nextToken is returned, there are more results available. The value of nextToken is a unique pagination token for each page. Make the call again using the returned token to retrieve the next page.

Type: String

### securityConfigSummaries

Details about the security configurations in your account.

Type: Array of [SecurityConfigSummary](#) objects

## Errors

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

### InternalServerError

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# ListSecurityPolicies

Returns information about configured OpenSearch Serverless security policies.

## Request Syntax

```
{  
  "maxResults": number,  
  "nextToken": "string",  
  "resource": [ "string" ],  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [maxResults](#)

An optional parameter that specifies the maximum number of results to return. You can use `nextToken` to get the next page of results. The default is 20.

Type: Integer

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

Required: No

### [nextToken](#)

If your initial `ListSecurityPolicies` operation returns a `nextToken`, you can include the returned `nextToken` in subsequent `ListSecurityPolicies` operations, which returns results in the next page.

Type: String

Required: No

### [resource](#)

Resource filters (can be collection or indexes) that policies can apply to.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 1000 items.

Required: No

### type

The type of policy.

Type: String

Valid Values: encryption | network

Required: Yes

## Response Syntax

```
{
  "nextToken": "string",
  "securityPolicySummaries": [
    {
      "createdDate": number,
      "description": "string",
      "lastModifiedDate": number,
      "name": "string",
      "policyVersion": "string",
      "type": "string"
    }
  ]
}
```

## Response Elements

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

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

### nextToken

When nextToken is returned, there are more results available. The value of nextToken is a unique pagination token for each page. Make the call again using the returned token to retrieve the next page.

Type: String

### [securityPolicySummaries](#)

Details about the security policies in your account.

Type: Array of [SecurityPolicySummary](#) objects

## Errors

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

### **InternalServerError**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# ListTagsForResource

Returns the tags for an OpenSearch Serverless resource. For more information, see [Tagging Amazon OpenSearch Serverless collections](#).

## Request Syntax

```
{  
  "resourceArn": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [resourceArn](#)

The Amazon Resource Name (ARN) of the resource. The resource must be active (not in the DELETING state), and must be owned by the account ID included in the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

## Response Syntax

```
{  
  "tags": [  
    {  
      "key": "string",  
      "value": "string"  
    }  
  ]  
}
```

## Response Elements

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

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

### [tags](#)

The tags associated with the resource.

Type: Array of [Tag](#) objects

Array Members: Minimum number of 0 items. Maximum number of 50 items.

## Errors

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

### **InternalServerError**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

- [AWS Command Line Interface](#)

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



# ListVpcEndpoints

Returns the OpenSearch Serverless-managed interface VPC endpoints associated with the current account. For more information, see [Access Amazon OpenSearch Serverless using an interface endpoint](#).

## Request Syntax

```
{  
  "maxResults": number,  
  "nextToken": "string",  
  "vpcEndpointFilters": {  
    "status": "string"  
  }  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [maxResults](#)

An optional parameter that specifies the maximum number of results to return. You can use `nextToken` to get the next page of results. The default is 20.

Type: Integer

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

Required: No

### [nextToken](#)

If your initial `ListVpcEndpoints` operation returns a `nextToken`, you can include the returned `nextToken` in subsequent `ListVpcEndpoints` operations, which returns results in the next page.

Type: String

Required: No

## vpcEndpointFilters

Filter the results according to the current status of the VPC endpoint. Possible statuses are CREATING, DELETING, UPDATING, ACTIVE, and FAILED.

Type: [VpcEndpointFilters](#) object

Required: No

## Response Syntax

```
{
  "nextToken": "string",
  "vpcEndpointSummaries": [
    {
      "id": "string",
      "name": "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.

### nextToken

When nextToken is returned, there are more results available. The value of nextToken is a unique pagination token for each page. Make the call again using the returned token to retrieve the next page.

Type: String

### vpcEndpointSummaries

Details about each VPC endpoint, including the name and current status.

Type: Array of [VpcEndpointSummary](#) objects

## Errors

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

### InternalServerError

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# TagResource

Associates tags with an OpenSearch Serverless resource. For more information, see [Tagging Amazon OpenSearch Serverless collections](#).

## Request Syntax

```
{
  "resourceArn": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [resourceArn](#)

The Amazon Resource Name (ARN) of the resource. The resource must be active (not in the DELETING state), and must be owned by the account ID included in the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

### [tags](#)

A list of tags (key-value pairs) to add to the resource. All tag keys in the request must be unique.

Type: Array of [Tag](#) objects

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Required: Yes

## 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](#).

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### **ServiceQuotaExceededException**

Thrown when you attempt to create more resources than the service allows based on service quotas.

HTTP Status Code: 400

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# UntagResource

Removes a tag or set of tags from an OpenSearch Serverless resource. For more information, see [Tagging Amazon OpenSearch Serverless collections](#).

## Request Syntax

```
{  
  "resourceArn": "string",  
  "tagKeys": [ "string" ]  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### resourceArn

The Amazon Resource Name (ARN) of the resource to remove tags from. The resource must be active (not in the DELETING state), and must be owned by the account ID included in the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

### tagKeys

The tag or set of tags to remove from the resource. All tag keys in the request must be unique.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 50 items.

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

Required: Yes

## 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](#).

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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



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

# UpdateAccessPolicy

Updates an OpenSearch Serverless access policy. For more information, see [Data access control for Amazon OpenSearch Serverless](#).

## Request Syntax

```
{  
  "clientToken": "string",  
  "description": "string",  
  "name": "string",  
  "policy": "string",  
  "policyVersion": "string",  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [clientToken](#)

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### [description](#)

A description of the policy. Typically used to store information about the permissions defined in the policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

## name

The name of the policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

## policy

The JSON policy document to use as the content for the policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20480.

Pattern: `[\u0009\u000A\u000D\u0020-\u007E\u00A1-\u00FF]+`

Required: No

## policyVersion

The version of the policy being updated.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*((([0-9a-zA-Z+/]{2}==)|([0-9a-zA-Z+/]{3}=)))?`

Required: Yes

## type

The type of policy.

Type: String

Valid Values: data

Required: Yes

## Response Syntax

```
{
  "accessPolicyDetail": {
    "createdDate": number,
    "description": "string",
    "lastModifiedDate": number,
    "name": "string",
    "policy": JSON value,
    "policyVersion": "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.

### [accessPolicyDetail](#)

Details about the updated access policy.

Type: [AccessPolicyDetail](#) object

## Errors

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

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## **See Also**

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

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

# UpdateAccountSettings

Update the OpenSearch Serverless settings for the current AWS account. For more information, see [Managing capacity limits for Amazon OpenSearch Serverless](#).

## Request Syntax

```
{
  "capacityLimits": {
    "maxIndexingCapacityInOCU": number,
    "maxSearchCapacityInOCU": number
  }
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [capacityLimits](#)

The maximum capacity limits for all OpenSearch Serverless collections, in OpenSearch Compute Units (OCUs). These limits are used to scale your collections based on the current workload. For more information, see [Managing capacity limits for Amazon OpenSearch Serverless](#).

Type: [CapacityLimits](#) object

Required: No

## Response Syntax

```
{
  "accountSettingsDetail": {
    "capacityLimits": {
      "maxIndexingCapacityInOCU": number,
      "maxSearchCapacityInOCU": 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.

### [accountSettingsDetail](#)

OpenSearch Serverless-related settings for the current AWS account.

Type: [AccountSettingsDetail](#) object

## Errors

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

### **InternalServerError**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

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



# UpdateCollection

Updates an OpenSearch Serverless collection.

## Request Syntax

```
{
  "clientToken": "string",
  "description": "string",
  "id": "string"
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### clientToken

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### description

A description of the collection.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

### id

The unique identifier of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 40.

Pattern: `^[a-z0-9]{3,40}$`

Required: Yes

## Response Syntax

```
{
  "updateCollectionDetail": {
    "arn": "string",
    "createdDate": number,
    "description": "string",
    "id": "string",
    "lastModifiedDate": number,
    "name": "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.

### [updateCollectionDetail](#)

Details about the updated collection.

Type: [UpdateCollectionDetail](#) object

## Errors

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

### ConflictException

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## **See Also**

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

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

# UpdateLifecyclePolicy

Updates an OpenSearch Serverless access policy. For more information, see [Updating data lifecycle policies](#).

## Request Syntax

```
{  
  "clientToken": "string",  
  "description": "string",  
  "name": "string",  
  "policy": "string",  
  "policyVersion": "string",  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [clientToken](#)

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### [description](#)

A description of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

## name

The name of the policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

## policy

The JSON policy document to use as the content for the lifecycle policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20480.

Pattern: `[\u0009\u000A\u000D\u0020-\u007E\u00A1-\u00FF]+`

Required: No

## policyVersion

The version of the policy being updated.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*((([0-9a-zA-Z+/]{2}==)|([0-9a-zA-Z+/]{3}=)))?$`

Required: Yes

## type

The type of lifecycle policy.

Type: String

Valid Values: `retention`

Required: Yes

## Response Syntax

```
{
  "lifecyclePolicyDetail": {
    "createdDate": number,
    "description": "string",
    "lastModifiedDate": number,
    "name": "string",
    "policy": JSON value,
    "policyVersion": "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.

### [lifecyclePolicyDetail](#)

Details about the updated lifecycle policy.

Type: [LifecyclePolicyDetail](#) object

## Errors

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

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### **ServiceQuotaExceededException**

Thrown when you attempt to create more resources than the service allows based on service quotas.

HTTP Status Code: 400

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## **See Also**

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

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

# UpdateSecurityConfig

Updates a security configuration for OpenSearch Serverless. For more information, see [SAML authentication for Amazon OpenSearch Serverless](#).

## Request Syntax

```
{
  "clientToken": "string",
  "configVersion": "string",
  "description": "string",
  "id": "string",
  "samlOptions": {
    "groupAttribute": "string",
    "metadata": "string",
    "sessionTimeout": number,
    "userAttribute": "string"
  }
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### clientToken

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### configVersion

The version of the security configuration to be updated. You can find the most recent version of a security configuration using the `GetSecurityPolicy` command.

Type: String



Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*((([0-9a-zA-Z+/]{2}==)|([0-9a-zA-Z+/]{3}=))?)?$`

Required: Yes

### description

A description of the security configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000.

Required: No

### id

The security configuration identifier. For SAML the ID will be `saml/<accountId>/<idpProviderName>`. For example, `saml/123456789123/OKTADev`.

Type: String

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

Required: Yes

### samlOptions

SAML options in in the form of a key-value map.

Type: [SamlConfigOptions](#) object

Required: No

## Response Syntax

```
{
  "securityConfigDetail": {
    "configVersion": "string",
    "createdDate": number,
    "description": "string",
    "id": "string",
    "lastModifiedDate": number,
```

```
    "samlOptions": {  
      "groupAttribute": "string",  
      "metadata": "string",  
      "sessionTimeout": number,  
      "userAttribute": "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.

### securityConfigDetail

Details about the updated security configuration.

Type: [SecurityConfigDetail](#) object

## Errors

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

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerError**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

## **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## **See Also**

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

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

# UpdateSecurityPolicy

Updates an OpenSearch Serverless security policy. For more information, see [Network access for Amazon OpenSearch Serverless](#) and [Encryption at rest for Amazon OpenSearch Serverless](#).

## Request Syntax

```
{  
  "clientToken": "string",  
  "description": "string",  
  "name": "string",  
  "policy": "string",  
  "policyVersion": "string",  
  "type": "string"  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### clientToken

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### description

A description of the policy. Typically used to store information about the permissions defined in the policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

## name

The name of the policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

## policy

The JSON policy document to use as the content for the new policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20480.

Pattern: `[\u0009\u000A\u000D\u0020-\u007E\u00A1-\u00FF]+`

Required: No

## policyVersion

The version of the policy being updated.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*((([0-9a-zA-Z+/]{2}==)|([0-9a-zA-Z+/]{3}=))?$`

Required: Yes

## type

The type of access policy.

Type: String

Valid Values: `encryption` | `network`

Required: Yes

## Response Syntax

```
{
  "securityPolicyDetail": {
    "createdDate": number,
    "description": "string",
    "lastModifiedDate": number,
    "name": "string",
    "policy": JSON value,
    "policyVersion": "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.

### securityPolicyDetail

Details about the updated security policy.

Type: [SecurityPolicyDetail](#) object

## Errors

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

### **ConflictException**

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

### **InternalServerErrorException**

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

### **ResourceNotFoundException**

Thrown when accessing or deleting a resource that does not exist.

HTTP Status Code: 400

### **ServiceQuotaExceededException**

Thrown when you attempt to create more resources than the service allows based on service quotas.

HTTP Status Code: 400

### **ValidationException**

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## **See Also**

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

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

# UpdateVpcEndpoint

Updates an OpenSearch Serverless-managed interface endpoint. For more information, see [Access Amazon OpenSearch Serverless using an interface endpoint](#).

## Request Syntax

```
{  
  "addSecurityGroupIds": [ "string" ],  
  "addSubnetIds": [ "string" ],  
  "clientToken": "string",  
  "id": "string",  
  "removeSecurityGroupIds": [ "string" ],  
  "removeSubnetIds": [ "string" ]  
}
```

## Request Parameters

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

The request accepts the following data in JSON format.

### [addSecurityGroupIds](#)

The unique identifiers of the security groups to add to the endpoint. Security groups define the ports, protocols, and sources for inbound traffic that you are authorizing into your endpoint.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

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

Pattern: `^[\w+\-]+$`

Required: No

### [addSubnetIds](#)

The ID of one or more subnets to add to the endpoint.

Type: Array of strings



Array Members: Minimum number of 1 item. Maximum number of 6 items.

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^subnet-([0-9a-f]{8}|[0-9a-f]{17})$`

Required: No

### clientToken

Unique, case-sensitive identifier to ensure idempotency of the request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: No

### id

The unique identifier of the interface endpoint to update.

Type: String

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

Pattern: `^vpce-[0-9a-z]*$`

Required: Yes

### removeSecurityGroupIds

The unique identifiers of the security groups to remove from the endpoint.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

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

Pattern: `^[\\w+\\-]+$`

Required: No

## [removeSubnetIds](#)

The unique identifiers of the subnets to remove from the endpoint.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 6 items.

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^subnet-([0-9a-f]{8}|[0-9a-f]{17})$`

Required: No

## Response Syntax

```
{
  "UpdateVpcEndpointDetail": {
    "id": "string",
    "lastModifiedDate": number,
    "name": "string",
    "securityGroupIds": [ "string" ],
    "status": "string",
    "subnetIds": [ "string" ]
  }
}
```

## Response Elements

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

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

### [UpdateVpcEndpointDetail](#)

Details about the updated VPC endpoint.

Type: [UpdateVpcEndpointDetail](#) object

## Errors

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

## ConflictException

When creating a resource, thrown when a resource with the same name already exists or is being created. When deleting a resource, thrown when the resource is not in the ACTIVE or FAILED state.

HTTP Status Code: 400

## InternalServerError

Thrown when an error internal to the service occurs while processing a request.

HTTP Status Code: 500

## ValidationException

Thrown when the HTTP request contains invalid input or is missing required input.

HTTP Status Code: 400

## See Also

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

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

# Data Types

The OpenSearch Service Serverless API contains several data types that various actions use. This section describes each data type in detail.

## Note

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

The following data types are supported:

- [AccessPolicyDetail](#)
- [AccessPolicyStats](#)
- [AccessPolicySummary](#)
- [AccountSettingsDetail](#)
- [CapacityLimits](#)
- [CollectionDetail](#)
- [CollectionErrorDetail](#)
- [CollectionFilters](#)
- [CollectionSummary](#)
- [CreateCollectionDetail](#)
- [CreateVpcEndpointDetail](#)
- [DeleteCollectionDetail](#)
- [DeleteVpcEndpointDetail](#)
- [EffectiveLifecyclePolicyDetail](#)
- [EffectiveLifecyclePolicyErrorDetail](#)
- [LifecyclePolicyDetail](#)
- [LifecyclePolicyErrorDetail](#)
- [LifecyclePolicyIdentifier](#)
- [LifecyclePolicyResourceIdentifier](#)
- [LifecyclePolicyStats](#)

- [LifecyclePolicySummary](#)
- [SamlConfigOptions](#)
- [SecurityConfigDetail](#)
- [SecurityConfigStats](#)
- [SecurityConfigSummary](#)
- [SecurityPolicyDetail](#)
- [SecurityPolicyStats](#)
- [SecurityPolicySummary](#)
- [Tag](#)
- [UpdateCollectionDetail](#)
- [UpdateVpcEndpointDetail](#)
- [VpcEndpointDetail](#)
- [VpcEndpointErrorDetail](#)
- [VpcEndpointFilters](#)
- [VpcEndpointSummary](#)

# AccessPolicyDetail

Details about an OpenSearch Serverless access policy.

## Contents

### **createdDate**

The date the policy was created.

Type: Long

Required: No

### **description**

The description of the policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

### **lastModifiedDate**

The timestamp of when the policy was last modified.

Type: Long

Required: No

### **name**

The name of the policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### **policy**

The JSON policy document without any whitespaces.

Type: JSON value

Required: No

### **policyVersion**

The version of the policy.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*((([0-9a-zA-Z+/]{2}==)|([0-9a-zA-Z+/]{3}=?))?)?$`

Required: No

### **type**

The type of access policy.

Type: String

Valid Values: data

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](#)

# AccessPolicyStats

Statistics for an OpenSearch Serverless access policy.

## Contents

### DataPolicyCount

The number of data access policies in the current account.

Type: Long

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](#)



# AccessPolicySummary

A summary of the data access policy.

## Contents

### **createdDate**

The Epoch time when the access policy was created.

Type: Long

Required: No

### **description**

The description of the access policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

### **lastModifiedDate**

The date and time when the collection was last modified.

Type: Long

Required: No

### **name**

The name of the access policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### **policyVersion**

The version of the policy.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*((([0-9a-zA-Z+/]{2}==)|([0-9a-zA-Z+/]{3}=))?)$`

Required: No

## type

The type of access policy. Currently, the only available type is data.

Type: String

Valid Values: data

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](#)

# AccountSettingsDetail

OpenSearch Serverless-related information for the current account.

## Contents

### capacityLimits

The maximum capacity limits for all OpenSearch Serverless collections, in OpenSearch Compute Units (OCUs). These limits are used to scale your collections based on the current workload. For more information, see [Managing capacity limits for Amazon OpenSearch Serverless](#).

Type: [CapacityLimits](#) 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](#)

# CapacityLimits

The maximum capacity limits for all OpenSearch Serverless collections, in OpenSearch Compute Units (OCUs). These limits are used to scale your collections based on the current workload. For more information, see [Managing capacity limits for Amazon OpenSearch Serverless](#).

## Contents

### **maxIndexingCapacityInOCU**

The maximum indexing capacity for collections.

Type: Integer

Valid Range: Minimum value of 2.

Required: No

### **maxSearchCapacityInOCU**

The maximum search capacity for collections.

Type: Integer

Valid Range: Minimum value of 2.

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](#)

# CollectionDetail

Details about each OpenSearch Serverless collection, including the collection endpoint and the OpenSearch Dashboards endpoint.

## Contents

### **arn**

The Amazon Resource Name (ARN) of the collection.

Type: String

Required: No

### **collectionEndpoint**

Collection-specific endpoint used to submit index, search, and data upload requests to an OpenSearch Serverless collection.

Type: String

Required: No

### **createdDate**

The Epoch time when the collection was created.

Type: Long

Required: No

### **dashboardEndpoint**

Collection-specific endpoint used to access OpenSearch Dashboards.

Type: String

Required: No

### **description**

A description of the collection.

Type: String

Required: No

**id**

A unique identifier for the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 40.

Pattern: `^[a-z0-9]{3,40}$`

Required: No

**kmsKeyArn**

The ARN of the AWS KMS key used to encrypt the collection.

Type: String

Required: No

**lastModifiedDate**

The date and time when the collection was last modified.

Type: Long

Required: No

**name**

The name of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

**standbyReplicas**

Details about an OpenSearch Serverless collection.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

### status

The current status of the collection.

Type: String

Valid Values: CREATING | DELETING | ACTIVE | FAILED

Required: No

### type

The type of collection.

Type: String

Valid Values: SEARCH | TIMESERIES | VECTORSEARCH

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](#)

# CollectionErrorDetail

Error information for an OpenSearch Serverless request.

## Contents

### **errorCode**

The error code for the request. For example, `NOT_FOUND`.

Type: String

Required: No

### **errorMessage**

A description of the error. For example, `The specified Collection is not found.`

Type: String

Required: No

### **id**

If the request contains collection IDs, the response includes the IDs provided in the request.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 40.

Pattern: `^[a-z0-9]{3,40}$`

Required: No

### **name**

If the request contains collection names, the response includes the names provided in the request.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`



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](#)

# CollectionFilters

A list of filter keys that you can use for LIST, UPDATE, and DELETE requests to OpenSearch Serverless collections.

## Contents

### name

The name of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### status

The current status of the collection.

Type: String

Valid Values: CREATING | DELETING | ACTIVE | FAILED

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](#)

# CollectionSummary

Details about each OpenSearch Serverless collection.

## Contents

### arn

The Amazon Resource Name (ARN) of the collection.

Type: String

Required: No

### id

The unique identifier of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 40.

Pattern: `^[a-z0-9]{3,40}$`

Required: No

### name

The name of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### status

The current status of the collection.

Type: String

Valid Values: CREATING | DELETING | ACTIVE | FAILED

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](#)

# CreateCollectionDetail

Details about the created OpenSearch Serverless collection.

## Contents

### **arn**

The Amazon Resource Name (ARN) of the collection.

Type: String

Required: No

### **createdDate**

The Epoch time when the collection was created.

Type: Long

Required: No

### **description**

A description of the collection.

Type: String

Required: No

### **id**

The unique identifier of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 40.

Pattern: `^[a-z0-9]{3,40}$`

Required: No

### **kmsKeyArn**

The Amazon Resource Name (ARN) of the KMS key with which to encrypt the collection.

Type: String

Required: No

### **lastModifiedDate**

The date and time when the collection was last modified.

Type: Long

Required: No

### **name**

The name of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### **standbyReplicas**

Creates details about an OpenSearch Serverless collection.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

### **status**

The current status of the collection.

Type: String

Valid Values: CREATING | DELETING | ACTIVE | FAILED

Required: No

### **type**

The type of collection.

Type: String

Valid Values: SEARCH | TIMESERIES | VECTORSEARCH

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](#)

# CreateVpcEndpointDetail

Creation details for an OpenSearch Serverless-managed interface endpoint. For more information, see [Access Amazon OpenSearch Serverless using an interface endpoint](#).

## Contents

### id

The unique identifier of the endpoint.

Type: String

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

Pattern: `^vpce-[0-9a-z]*$`

Required: No

### name

The name of the endpoint.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### status

The current status in the endpoint creation process.

Type: String

Valid Values: PENDING | DELETING | ACTIVE | FAILED

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](#)

# DeleteCollectionDetail

Details about a deleted OpenSearch Serverless collection.

## Contents

### id

The unique identifier of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 40.

Pattern: `^[a-z0-9]{3,40}$`

Required: No

### name

The name of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### status

The current status of the collection.

Type: String

Valid Values: CREATING | DELETING | ACTIVE | FAILED

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](#)

# DeleteVpcEndpointDetail

Deletion details for an OpenSearch Serverless-managed interface endpoint.

## Contents

### id

The unique identifier of the endpoint.

Type: String

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

Pattern: `^vpce-[0-9a-z]*$`

Required: No

### name

The name of the endpoint.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### status

The current status of the endpoint deletion process.

Type: String

Valid Values: PENDING | DELETING | ACTIVE | FAILED

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](#)

# EffectiveLifecyclePolicyDetail

Error information for an OpenSearch Serverless request.

## Contents

### **noMinRetentionPeriod**

The minimum number of index retention days set. That is an optional param that will return as `true` if the minimum number of days or hours is not set to a index resource.

Type: Boolean

Required: No

### **policyName**

The name of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### **resource**

The name of the OpenSearch Serverless index resource.

Type: String

Required: No

### **resourceType**

The type of OpenSearch Serverless resource. Currently, the only supported resource is `index`.

Type: String

Valid Values: `index`

Required: No

## **retentionPeriod**

The minimum number of index retention in days or hours. This is an optional parameter that will return only if it's set.

Type: String

Required: No

## **type**

The type of lifecycle policy.

Type: String

Valid Values: retention

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](#)

# EffectiveLifecyclePolicyErrorDetail

Error information for an OpenSearch Serverless request.

## Contents

### **errorCode**

The error code for the request.

Type: String

Required: No

### **errorMessage**

A description of the error. For example, The specified Index resource is not found.

Type: String

Required: No

### **resource**

The name of OpenSearch Serverless index resource.

Type: String

Required: No

### **type**

The type of lifecycle policy.

Type: String

Valid Values: `retention`

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](#)

# LifecyclePolicyDetail

Details about an OpenSearch Serverless lifecycle policy.

## Contents

### **createdDate**

The date the lifecycle policy was created.

Type: Long

Required: No

### **description**

The description of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

### **lastModifiedDate**

The timestamp of when the lifecycle policy was last modified.

Type: Long

Required: No

### **name**

The name of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### **policy**

The JSON policy document without any whitespaces.

Type: JSON value

Required: No

### **policyVersion**

The version of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*((([0-9a-zA-Z+/]{2}==)|([0-9a-zA-Z+/]{3}=)))?$`

Required: No

### **type**

The type of lifecycle policy.

Type: String

Valid Values: `retention`

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](#)

# LifecyclePolicyErrorDetail

Error information for an OpenSearch Serverless request.

## Contents

### **errorCode**

The error code for the request. For example, NOT\_FOUND.

Type: String

Required: No

### **errorMessage**

A description of the error. For example, The specified Lifecycle Policy is not found.

Type: String

Required: No

### **name**

The name of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### **type**

The type of lifecycle policy.

Type: String

Valid Values: `retention`

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](#)

# LifecyclePolicyIdentifier

The unique identifiers of policy types and policy names.

## Contents

### name

The name of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: Yes

### type

The type of lifecycle policy.

Type: String

Valid Values: `retention`

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](#)

# LifecyclePolicyResourceIdentifier

The unique identifiers of policy types and resource names.

## Contents

### resource

The name of the OpenSearch Serverless index resource.

Type: String

Pattern: `^index/[a-z][a-z0-9-]{3,32}/([a-z;0-9&$%][+.\~=\-_a-z;0-9&$%]*|\*)$`

Required: Yes

### type

The type of lifecycle policy.

Type: String

Valid Values: `retention`

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](#)

# LifecyclePolicyStats

Statistics for an OpenSearch Serverless lifecycle policy.

## Contents

### RetentionPolicyCount

The number of retention lifecycle policies in the current account.

Type: Long

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](#)



# LifecyclePolicySummary

A summary of the lifecycle policy.

## Contents

### **createdDate**

The Epoch time when the lifecycle policy was created.

Type: Long

Required: No

### **description**

The description of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

### **lastModifiedDate**

The date and time when the lifecycle policy was last modified.

Type: Long

Required: No

### **name**

The name of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### **policyVersion**

The version of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*((([0-9a-zA-Z+/]{2}==)|([0-9a-zA-Z+/]{3}=)))?$`

Required: No

## type

The type of lifecycle policy.

Type: String

Valid Values: `retention`

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](#)

# SamlConfigOptions

Describes SAML options for an OpenSearch Serverless security configuration in the form of a key-value map.

## Contents

### **metadata**

The XML IdP metadata file generated from your identity provider.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 51200.

Pattern: `[\u0009\u000A\u000D\u0020-\u007E\u00A1-\u00FF]+`

Required: Yes

### **groupAttribute**

The group attribute for this SAML integration.

Type: String

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

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

Required: No

### **sessionTimeout**

The session timeout, in minutes. Default is 60 minutes (12 hours).

Type: Integer

Valid Range: Minimum value of 5. Maximum value of 720.

Required: No

### **userAttribute**

A user attribute for this SAML integration.

Type: String

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

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

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](#)

# SecurityConfigDetail

Details about a security configuration for OpenSearch Serverless.

## Contents

### **configVersion**

The version of the security configuration.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*(( [0-9a-zA-Z+/]{2}=) | ([0-9a-zA-Z+/]{3}=))?$`

Required: No

### **createdDate**

The date the configuration was created.

Type: Long

Required: No

### **description**

The description of the security configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000.

Required: No

### **id**

The unique identifier of the security configuration.

Type: String

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

Required: No

**lastModifiedDate**

The timestamp of when the configuration was last modified.

Type: Long

Required: No

**samlOptions**

SAML options for the security configuration in the form of a key-value map.

Type: [SamlConfigOptions](#) object

Required: No

**type**

The type of security configuration.

Type: String

Valid Values: `saml`

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](#)

# SecurityConfigStats

Statistics for an OpenSearch Serverless security configuration.

## Contents

### SamlConfigCount

The number of security configurations in the current account.

Type: Long

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](#)

# SecurityConfigSummary

A summary of a security configuration for OpenSearch Serverless.

## Contents

### **configVersion**

The version of the security configuration.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*(( [0-9a-zA-Z+/]{2}=) | ([0-9a-zA-Z+/]{3}=))?$`

Required: No

### **createdDate**

The Epoch time when the security configuration was created.

Type: Long

Required: No

### **description**

The description of the security configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000.

Required: No

### **id**

The unique identifier of the security configuration.

Type: String

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

Required: No



## **lastModifiedDate**

The timestamp of when the configuration was last modified.

Type: Long

Required: No

## **type**

The type of security configuration.

Type: String

Valid Values: sam1

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](#)

# SecurityPolicyDetail

Details about an OpenSearch Serverless security policy.

## Contents

### **createdDate**

The date the policy was created.

Type: Long

Required: No

### **description**

The description of the security policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

### **lastModifiedDate**

The timestamp of when the policy was last modified.

Type: Long

Required: No

### **name**

The name of the policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### **policy**

The JSON policy document without any whitespaces.

Type: JSON value

Required: No

### **policyVersion**

The version of the policy.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*((([0-9a-zA-Z+/]{2}==)|([0-9a-zA-Z+/]{3}=))?)?$`

Required: No

### **type**

The type of security policy.

Type: String

Valid Values: `encryption` | `network`

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](#)

# SecurityPolicyStats

Statistics for an OpenSearch Serverless security policy.

## Contents

### EncryptionPolicyCount

The number of encryption policies in the current account.

Type: Long

Required: No

### NetworkPolicyCount

The number of network policies in the current account.

Type: Long

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](#)

# SecurityPolicySummary

A summary of a security policy for OpenSearch Serverless.

## Contents

### **createdDate**

The date the policy was created.

Type: Long

Required: No

### **description**

The description of the security policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: No

### **lastModifiedDate**

The timestamp of when the policy was last modified.

Type: Long

Required: No

### **name**

The name of the policy.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### **policyVersion**

The version of the policy.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 36.

Pattern: `^([0-9a-zA-Z+/]{4})*((([0-9a-zA-Z+/]{2}==)|([0-9a-zA-Z+/]{3}=)))?$`

Required: No

## type

The type of security policy.

Type: String

Valid Values: `encryption` | `network`

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](#)

# Tag

A map of key-value pairs associated to an OpenSearch Serverless resource.

## Contents

### key

The key to use in the tag.

Type: String

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

Required: Yes

### value

The value of the tag.

Type: String

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

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](#)

# UpdateCollectionDetail

Details about an updated OpenSearch Serverless collection.

## Contents

### **arn**

The Amazon Resource Name (ARN) of the collection.

Type: String

Required: No

### **createdDate**

The date and time when the collection was created.

Type: Long

Required: No

### **description**

The description of the collection.

Type: String

Required: No

### **id**

The unique identifier of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 40.

Pattern: `^[a-z0-9]{3,40}$`

Required: No

### **lastModifiedDate**

The date and time when the collection was last modified.



Type: Long

Required: No

### **name**

The name of the collection.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### **status**

The current status of the collection.

Type: String

Valid Values: CREATING | DELETING | ACTIVE | FAILED

Required: No

### **type**

The collection type.

Type: String

Valid Values: SEARCH | TIMESERIES | VECTORSEARCH

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](#)



# UpdateVpcEndpointDetail

Update details for an OpenSearch Serverless-managed interface endpoint.

## Contents

### id

The unique identifier of the endpoint.

Type: String

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

Pattern: `^vpce-[0-9a-z]*$`

Required: No

### lastModifiedDate

The timestamp of when the endpoint was last modified.

Type: Long

Required: No

### name

The name of the endpoint.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### securityGroupIds

The unique identifiers of the security groups that define the ports, protocols, and sources for inbound traffic that you are authorizing into your endpoint.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

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

Pattern: `^[\\w+\\-]+$`

Required: No

### **status**

The current status of the endpoint update process.

Type: String

Valid Values: PENDING | DELETING | ACTIVE | FAILED

Required: No

### **subnetIds**

The ID of the subnets from which you access OpenSearch Serverless.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 6 items.

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^subnet-([0-9a-f]{8}|[0-9a-f]{17})$`

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](#)

# VpcEndpointDetail

Details about an OpenSearch Serverless-managed interface endpoint.

## Contents

### **createdDate**

The date the endpoint was created.

Type: Long

Required: No

### **id**

The unique identifier of the endpoint.

Type: String

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

Pattern: `^vpce-[0-9a-z]*$`

Required: No

### **name**

The name of the endpoint.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### **securityGroupIds**

The unique identifiers of the security groups that define the ports, protocols, and sources for inbound traffic that you are authorizing into your endpoint.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

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

Pattern: `^\w+\-]+$`

Required: No

### **status**

The current status of the endpoint.

Type: String

Valid Values: PENDING | DELETING | ACTIVE | FAILED

Required: No

### **subnetIds**

The ID of the subnets from which you access OpenSearch Serverless.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 6 items.

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^subnet-([0-9a-f]{8}|[0-9a-f]{17})$`

Required: No

### **vpcId**

The ID of the VPC from which you access OpenSearch Serverless.

Type: String

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

Pattern: `^vpc-[0-9a-z]*$`

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](#)

# VpcEndpointErrorDetail

Error information for a failed BatchGetVpcEndpoint request.

## Contents

### errorCode

The error code for the failed request.

Type: String

Required: No

### errorMessage

An error message describing the reason for the failure.

Type: String

Required: No

### id

The unique identifier of the VPC endpoint.

Type: String

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

Pattern: ^vpce-[0-9a-z]\*\$

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](#)





# VpcEndpointFilters

Filter the results of a `ListVpcEndpoints` request.

## Contents

### status

The current status of the endpoint.

Type: String

Valid Values: PENDING | DELETING | ACTIVE | FAILED

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](#)

# VpcEndpointSummary

The VPC endpoint object.

## Contents

### id

The unique identifier of the endpoint.

Type: String

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

Pattern: `^vpce-[0-9a-z]*$`

Required: No

### name

The name of the endpoint.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 32.

Pattern: `^[a-z][a-z0-9-]+$`

Required: No

### status

The current status of the endpoint.

Type: String

Valid Values: PENDING | DELETING | ACTIVE | FAILED

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](#)

# 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: 400

## **IncompleteSignature**

The request signature does not conform to AWS standards.

HTTP Status Code: 400

## **InternalFailure**

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

HTTP Status Code: 500

## **InvalidAction**

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

HTTP Status Code: 400

## **InvalidClientTokenId**

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

HTTP Status Code: 403

## **NotAuthorized**

You do not have permission to perform this action.

HTTP Status Code: 400

## **OptInRequired**

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

HTTP Status Code: 403



**RequestExpired**

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

HTTP Status Code: 400

**ServiceUnavailable**

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

HTTP Status Code: 503

**ThrottlingException**

The request was denied due to request throttling.

HTTP Status Code: 400

**ValidationError**

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

HTTP Status Code: 400