



Welcome

AWS Control Catalog



API Version 2018-05-10

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AWS Control Catalog: Welcome

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Welcome

Welcome to the AWS Control Catalog API reference. This guide is for developers who need detailed information about how to programmatically identify and filter the common controls and related metadata that are available to AWS customers. This API reference provides descriptions, syntax, and usage examples for each of the actions and data types that are supported by AWS Control Catalog.

Use the following links to get started with the AWS Control Catalog API:

- [Actions](#): An alphabetical list of all Control Catalog API operations.
- [Data types](#): An alphabetical list of all Control Catalog data types.
- [Common parameters](#): Parameters that all operations can use.
- [Common errors](#): Client and server errors that all operations can return.

This document was last published on January 9, 2025.

Actions

The following actions are supported:

- [GetControl](#)
- [ListCommonControls](#)
- [ListControls](#)
- [ListDomains](#)
- [ListObjectives](#)

GetControl

Returns details about a specific control, most notably a list of AWS Regions where this control is supported. Input a value for the *ControlArn* parameter, in ARN form. GetControl accepts *controltower* or *controlcatalog* control ARNs as input. Returns a *controlcatalog* ARN format.

In the API response, controls that have the value GLOBAL in the Scope field do not show the DeployableRegions field, because it does not apply. Controls that have the value REGIONAL in the Scope field return a value for the DeployableRegions field, as shown in the example.

Request Syntax

```
POST /get-control HTTP/1.1
Content-type: application/json
```

```
{
  "ControlArn": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

ControlArn

The Amazon Resource Name (ARN) of the control. It has one of the following formats:

Global format

```
arn:{PARTITION}:controlcatalog:::control/{CONTROL_CATALOG_OPAQUE_ID}
```

Or Regional format

```
arn:{PARTITION}:controltower:{REGION}:::control/{CONTROL_TOWER_OPAQUE_ID}
```

Here is a more general pattern that covers AWS Control Tower and Control Catalog ARNs:


```
^arn:(aws(?:[-a-z]*)?):(controlcatalog|controltower):[a-zA-Z0-9-]*::control/[0-9a-zA-Z_\-\-]+$
```

Type: String

Length Constraints: Minimum length of 34. Maximum length of 2048.

```
Pattern: arn:(aws(?:[-a-z]*)?):(controlcatalog|controltower):[a-zA-Z0-9-]*::control/[0-9a-zA-Z_\-\-]+
```

Required: Yes

Response Syntax

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

{
  "Arn": "string",
  "Behavior": "string",
  "Description": "string",
  "Implementation": {
    "Type": "string"
  },
  "Name": "string",
  "Parameters": [
    {
      "Name": "string"
    }
  ],
  "RegionConfiguration": {
    "DeployableRegions": [ "string" ],
    "Scope": "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.

Arn

The Amazon Resource Name (ARN) of the control.

Type: String

Length Constraints: Minimum length of 34. Maximum length of 2048.

Pattern: `arn:(aws(?:[-a-z]*)?):(controlcatalog|controltower):[a-zA-Z0-9-]*::control/[0-9a-zA-Z_\-]+`

Behavior

A term that identifies the control's functional behavior. One of Preventive, Detective, Proactive

Type: String

Valid Values: PREVENTIVE | PROACTIVE | DETECTIVE

Description

A description of what the control does.

Type: String

Implementation

Returns information about the control, as an `ImplementationDetails` object that shows the underlying implementation type for a control.

Type: [ImplementationDetails](#) object

Name

The display name of the control.

Type: String

Parameters

Returns an array of `ControlParameter` objects that specify the parameters a control supports. An empty list is returned for controls that don't support parameters.

Type: Array of [ControlParameter](#) objects

RegionConfiguration

Returns information about the control, including the scope of the control, if enabled, and the Regions in which the control currently is available for deployment. For more information about scope, see [Global services](#).

If you are applying controls through an AWS Control Tower landing zone environment, remember that the values returned in the `RegionConfiguration` API operation are not related to the governed Regions in your landing zone. For example, if you are governing Regions A,B,and C while the control is available in Regions A, B, C, and D, you'd see a response with `DeployableRegions` of A, B, C, and D for a control with `REGIONAL` scope, even though you may not intend to deploy the control in Region D, because you do not govern it through your landing zone.

Type: [RegionConfiguration](#) object

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

An internal service error occurred during the processing of your request. Try again later.

HTTP Status Code: 500

ResourceNotFoundException

The requested resource does not exist.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The request has invalid or missing parameters.

HTTP Status Code: 400

Examples

Retrieve information about a control

Use this operation to retrieve information about a control, including a list of Regions in which the control currently is available for deployment.

Sample Request

```
aws controlcatalog get-control --control-arn arn:aws:controlcatalog::control/ka8e3pkqefnjsxuyc26ji580 --region us-east-1
```

```
##Alternatively
```

Sample Request

```
aws controlcatalog get-control --control-arn arn:aws:controltower:us-east-1::control/ZWORVQKMSSVN --region us-east-1
```

Sample Response

```
{
  "Arn": "arn:aws:controlcatalog::control/ka8e3pkqefnjsxuyc26ji580",
  "Name": "Deny access to AWS based on the requested AWS Region; for an organizational unit",
  "Description": "Disallows access to unlisted operations in global and regional services outside of the specified Regions for an organizational unit.",
  "Behavior": "PREVENTIVE",
  "RegionConfiguration": {
    "Scope": "GLOBAL"
  },
  "Implementation": {
    "Type": "AWS::Organizations::Policy::SERVICE_CONTROL_POLICY"
  }
}
```

```
    },
    "Parameters": [
      {
        "Name": "ExemptedPrincipalArns"
      },
      {
        "Name": "AllowedRegions"
      },
      {
        "Name": "ExemptedActions"
      }
    ]
  }
}
```

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](#)

ListCommonControls

Returns a paginated list of common controls from the AWS Control Catalog.

You can apply an optional filter to see common controls that have a specific objective. If you don't provide a filter, the operation returns all common controls.

Request Syntax

```
POST /common-controls?maxResults=MaxResults&nextToken=NextToken HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "CommonControlFilter": {
    "Objectives": [
      {
        "Arn": "string"
      }
    ]
  }
}
```

URI Request Parameters

The request uses the following URI parameters.

MaxResults

The maximum number of results on a page or for an API request call.

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

NextToken

The pagination token that's used to fetch the next set of results.

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

Request Body

The request accepts the following data in JSON format.

CommonControlFilter

An optional filter that narrows the results to a specific objective.

This filter allows you to specify one objective ARN at a time. Passing multiple ARNs in the `CommonControlFilter` isn't currently supported.

Type: [CommonControlFilter](#) object

Required: No

Response Syntax

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

{
  "CommonControls": [
    {
      "Arn": "string",
      "CreateTime": number,
      "Description": "string",
      "Domain": {
        "Arn": "string",
        "Name": "string"
      },
      "LastUpdateTime": number,
      "Name": "string",
      "Objective": {
        "Arn": "string",
        "Name": "string"
      }
    }
  ],
  "NextToken": "string"
}
```

Response Elements

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

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

CommonControls

The list of common controls that the `ListCommonControls` API returns.

Type: Array of [CommonControlSummary](#) objects

NextToken

The pagination token that's used to fetch the next set of results.

Type: String

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerErrorException

An internal service error occurred during the processing of your request. Try again later.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The request has invalid or missing parameters.

HTTP Status Code: 400

Examples

Filtering common controls by objective

You can use the `ListCommonControls` operation to return a filtered list of common controls. For example, you can see a list of all common controls that have the objective of *Asset inventory management*.

To filter results by objective

1. Use the `ListObjectives` operation to see the objectives that you can use as filters.
2. Find the objective that you want to use as a filter, and take note of its ARN.
3. Use the `ListCommonControls` operation and include the `ControlObjectives` parameter. For the ARN attribute value, specify the objective ARN from step 2.

Note

Keep in mind that you can only filter by one objective at a time. Specifying multiple objective ARNs isn't currently supported.

If you want to filter by more than one ARN, we recommend that you run the `ListCommonControls` operation separately for each ARN.

The sample request below uses the following objective ARN as a filter:

`arn:aws:controlcatalog:::objective/ad11p1961s8erra9m185wa1nn`. This ARN represents the *Asset inventory management* objective.

The sample response shows the result that the `ListCommonControls` operation might return if seven common controls matched the filter criteria of *Asset inventory management*.

Sample Request

```
{
  "CommonControlFilter": {
    "Objectives": [{
      "Arn": "arn:aws:controlcatalog:::objective/ad11p1961s8erra9m185wa1nn"
    }]
  }
}
```

Sample Response

```
{
  "CommonControls": [{
    "Arn": "arn:aws:controlcatalog::common-control/d4s7ik8fgv8082v3x31hifzcc",
    "CreateTime": 1.710288E9,
    "Description": "Reconcile the organization's asset inventory with other data
sources, and conduct asset audits to verify the accuracy of the asset inventory.",
    "Domain": {
      "Arn": "arn:aws:controlcatalog::domain/d4msesd9vvmzmmuvlv06m92uq",
      "Name": "Asset management"
    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Asset inventory reconciliation and audit",
    "Objective": {
      "Arn": "arn:aws:controlcatalog::objective/ad11p1961s8erra9m185wa1nn",
      "Name": "Asset inventory management"
    }
  }], {
    "Arn": "arn:aws:controlcatalog::common-control/lukpmkewk4i92tjmhsvewi4y7",
    "CreateTime": 1.710288E9,
    "Description": "Maintain an asset inventory of organization authorized and
existing hardware, software, and media. Where possible, utilize automated tools to
facilitate the discovery and ongoing tracking of such assets.",
    "Domain": {
      "Arn": "arn:aws:controlcatalog::domain/d4msesd9vvmzmmuvlv06m92uq",
      "Name": "Asset management"
    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Inventory of authorized assets and automated discovery",
    "Objective": {
      "Arn": "arn:aws:controlcatalog::objective/ad11p1961s8erra9m185wa1nn",
      "Name": "Asset inventory management"
    }
  }], {
    "Arn": "arn:aws:controlcatalog::common-control/c0qrxhefhmxbq22tiejp3enn",
    "CreateTime": 1.710288E9,
    "Description": "Take appropriate actions to identify and resolve unauthorized
assets within the network environment on a periodic and consistent basis. Appropriate
actions include, but are not limited to, removing the asset from the network,
quarantining the asset, or denying connectivity to the asset.",
    "Domain": {
      "Arn": "arn:aws:controlcatalog::domain/d4msesd9vvmzmmuvlv06m92uq",
      "Name": "Asset management"
    }
  }
}
```

```

    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Unauthorized asset management",
    "Objective": {
      "Arn": "arn:aws:controlcatalog::objective/ad11p1961s8erra9m185wa1nn",
      "Name": "Asset inventory management"
    }
  }, {
    "Arn": "arn:aws:controlcatalog::common-control/5u2qgwuw3z1y0lrof60yf6264",
    "CreateTime": 1.710288E9,
    "Description": "Track all physical and digital assets to ensure proper use
and protection. Monitor status of digital assets like systems, devices, software,
applications, and data throughout their lifecycle. Use real-time location tracking for
physical assets through technologies like GPS and RFID where possible.",
    "Domain": {
      "Arn": "arn:aws:controlcatalog::domain/d4msesd9vvmzmmuvlv06m92uq",
      "Name": "Asset management"
    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Asset tracking",
    "Objective": {
      "Arn": "arn:aws:controlcatalog::objective/ad11p1961s8erra9m185wa1nn",
      "Name": "Asset inventory management"
    }
  }, {
    "Arn": "arn:aws:controlcatalog::common-control/1tejgq26c0djpzgskw31uscm4",
    "CreateTime": 1.710288E9,
    "Description": "Regularly analyze hardware and software assets to assess
criticality, usage, value, and other key metrics. Generate comprehensive reports on
the asset inventory.",
    "Domain": {
      "Arn": "arn:aws:controlcatalog::domain/d4msesd9vvmzmmuvlv06m92uq",
      "Name": "Asset management"
    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Asset inventory analysis and reporting",
    "Objective": {
      "Arn": "arn:aws:controlcatalog::objective/ad11p1961s8erra9m185wa1nn",
      "Name": "Asset inventory management"
    }
  }, {
    "Arn": "arn:aws:controlcatalog::common-control/eg1hxxu2e77a7w2wv79quwaxl",
    "CreateTime": 1.710288E9,

```

```
    "Description": "Define asset owners, including who has responsibility for
managing each asset.",
    "Domain": {
        "Arn": "arn:aws:controlcatalog::domain/d4msesd9vvmzmmuvlv06m92uq",
        "Name": "Asset management"
    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Asset ownership",
    "Objective": {
        "Arn": "arn:aws:controlcatalog::objective/ad11p1961s8erra9m185wa1nn",
        "Name": "Asset inventory management"
    }
}, {
    "Arn": "arn:aws:controlcatalog::common-control/ec1fxlvgtcxlfx2nzremqcca7r",
    "CreateTime": 1.710288E9,
    "Description": "Track and monitor asset status, including whether they are
operational, in maintenance, or out of service.",
    "Domain": {
        "Arn": "arn:aws:controlcatalog::domain/d4msesd9vvmzmmuvlv06m92uq",
        "Name": "Asset management"
    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Asset status tracking",
    "Objective": {
        "Arn": "arn:aws:controlcatalog::objective/ad11p1961s8erra9m185wa1nn",
        "Name": "Asset inventory management"
    }
}]
}
```

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](#)

ListControls

Returns a paginated list of all available controls in the AWS Control Catalog library. Allows you to discover available controls. The list of controls is given as structures of type *controlSummary*. The ARN is returned in the global *controlcatalog* format, as shown in the examples.

Request Syntax

```
POST /list-controls?maxResults=MaxResults&nextToken=NextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

MaxResults

The maximum number of results on a page or for an API request call.

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

NextToken

The pagination token that's used to fetch the next set of results.

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

Request Body

The request does not have a request body.

Response Syntax

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

{
  "Controls": [
    {
      "Arn": "string",
```

```
    "Description": "string",  
    "Name": "string"  
  }  
],  
"NextToken": "string"  
}
```

Response Elements

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

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

Controls

Returns a list of controls, given as structures of type *controlSummary*.

Type: Array of [ControlSummary](#) objects

NextToken

The pagination token that's used to fetch the next set of results.

Type: String

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

An internal service error occurred during the processing of your request. Try again later.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The request has invalid or missing parameters.

HTTP Status Code: 400

Examples

Retrieve a list of controls

Use this operation to retrieve a paginated list of available controls, by Region.

Sample Request

```
aws controlcatalog list-controls --max-result 2 --region us-east-1
```

Sample Response

```
{
  "Controls": [
    {
      "Arn": "arn:aws:controlcatalog::control/4b0nsxnd47747up54ytdqesxi",
      "Name": "Require any AWS CodeBuild project environment to have logging configured",
      "Description": "This control checks whether AWS CodeBuild projects environment has at least one logging option enabled."
    },
    {
      "Arn": "arn:aws:controlcatalog::control/7rrdelyjxvdp8hyfina89c07z",
      "Name": "ECS containers should run as non-privileged",
      "Description": "This control checks if the privileged parameter in the container definition of Amazon ECS task definitions is set to 'true'. This control fails if this parameter is equal to 'true'."
    }
  ],
  "NextToken": "..."
```



```
}
```

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](#)

ListDomains

Returns a paginated list of domains from the AWS Control Catalog.

Request Syntax

```
POST /domains?maxResults=MaxResults&nextToken=NextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

MaxResults

The maximum number of results on a page or for an API request call.

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

NextToken

The pagination token that's used to fetch the next set of results.

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

Request Body

The request does not have a request body.

Response Syntax

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

{
  "Domains": [
    {
      "Arn": "string",
      "CreateTime": number,
      "Description": "string",
      "LastUpdateTime": number,
      "Name": "string"
    }
  ]
}
```

```
    }  
  ],  
  "NextToken": "string"  
}
```

Response Elements

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

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

Domains

The list of domains that the `ListDomains` API returns.

Type: Array of [DomainSummary](#) objects

NextToken

The pagination token that's used to fetch the next set of results.

Type: String

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

An internal service error occurred during the processing of your request. Try again later.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The request has invalid or missing parameters.

HTTP Status Code: 400

Examples

Returning a list of domains

Use this operation to see a paginated list of all domains that are currently available in the AWS Control Catalog.

Sample Request

```
aws controlcatalog list-domains
```

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](#)

ListObjectives

Returns a paginated list of objectives from the AWS Control Catalog.

You can apply an optional filter to see the objectives that belong to a specific domain. If you don't provide a filter, the operation returns all objectives.

Request Syntax

```
POST /objectives?maxResults=MaxResults&nextToken=NextToken HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "ObjectiveFilter": {
    "Domains": [
      {
        "Arn": "string"
      }
    ]
  }
}
```

URI Request Parameters

The request uses the following URI parameters.

MaxResults

The maximum number of results on a page or for an API request call.

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

NextToken

The pagination token that's used to fetch the next set of results.

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

Request Body

The request accepts the following data in JSON format.

ObjectiveFilter

An optional filter that narrows the results to a specific domain.

This filter allows you to specify one domain ARN at a time. Passing multiple ARNs in the `ObjectiveFilter` isn't currently supported.

Type: [ObjectiveFilter](#) object

Required: No

Response Syntax

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

{
  "NextToken": "string",
  "Objectives": [
    {
      "Arn": "string",
      "CreateTime": number,
      "Description": "string",
      "Domain": {
        "Arn": "string",
        "Name": "string"
      },
      "LastUpdateTime": number,
      "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.

NextToken

The pagination token that's used to fetch the next set of results.

Type: String

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

Objectives

The list of objectives that the `ListObjectives` API returns.

Type: Array of [ObjectiveSummary](#) objects

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerErrorException

An internal service error occurred during the processing of your request. Try again later.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The request has invalid or missing parameters.

HTTP Status Code: 400

Examples

Filtering objectives by domain

You can use the `ListObjectives` operation to return a filtered list of objectives. For example, you can see all of the objectives that fall under a specific domain such as *Asset management*.

To filter results by domain

1. Use the `ListDomains` operation to see the domains that you can use as filters.
2. Find the domain that you want to use as a filter, and take note of its ARN.
3. Use the `ListObjectives` operation and include the `Domains` parameter. For the ARN attribute value, specify the domain ARN from step 2.

Note

Keep in mind that you can only filter by one domain at a time. Specifying multiple domain ARNs isn't currently supported.

If you want to filter by more than one ARN, we recommend that you run the `ListObjectives` operation separately for each ARN.

The sample request below uses the following domain ARN as a filter:

`arn:aws:controlcatalog:::domain/d4msesd9vvmzmmuv1v06m92uq`. This ARN represents the *Asset management* domain.

The sample response shows the result that the `ListObjectives` operation might return if five objectives matched the filter criteria of *Asset management*.

Sample Request

```
{
  "ObjectiveFilter": {
    "Domains": [{
      "Arn": "arn:aws:controlcatalog:::domain/d4msesd9vvmzmmuv1v06m92uq"
    }]
  }
}
```

Sample Response

```
{
  "Objectives": [{
    "Arn": "arn:aws:controlcatalog:::objective/ad11p1961s8erra9m185wa1nn",
    "CreateTime": 1.710288E9,
```



```

    "Description": "This control objective focuses on maintaining an accurate and
up-to-date inventory of assets, including hardware, software, and data, to protect
organization investments from harm or loss.",
    "Domain": {
      "Arn": "arn:aws:controlcatalog:::domain/d4msesd9vvmzmmuvlv06m92uq",
      "Name": "Asset management"
    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Asset inventory management"
  }, {
    "Arn": "arn:aws:controlcatalog:::objective/90gifwthorhxhxq7m0rtss98u",
    "CreateTime": 1.710288E9,
    "Description": "This control objective focuses on classifying assets based on
their value, sensitivity, and criticality to the organization to manage investment
risk and unauthorized access to assets and information.",
    "Domain": {
      "Arn": "arn:aws:controlcatalog:::domain/d4msesd9vvmzmmuvlv06m92uq",
      "Name": "Asset management"
    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Asset classification"
  }, {
    "Arn": "arn:aws:controlcatalog:::objective/3frxxgl64u9kzttiuheywykf7",
    "CreateTime": 1.710288E9,
    "Description": "This control objective focuses on maintaining the availability
and integrity of assets, including performance management, regular maintenance,
and repairs to protect and extract the maximum value of the organization's IT
investments.",
    "Domain": {
      "Arn": "arn:aws:controlcatalog:::domain/d4msesd9vvmzmmuvlv06m92uq",
      "Name": "Asset management"
    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Asset maintenance"
  }, {
    "Arn": "arn:aws:controlcatalog:::objective/5ve4jodybrg8wnky75fp50sbf",
    "CreateTime": 1.710288E9,
    "Description": "This control objective focuses on managing assets throughout
their entire lifecycle, including acquisition, deployment, use, and retirement. This
helps manage risks associated with asset costs by ensuring optimum asset productivity,
performance, efficiency, and profitability.",
    "Domain": {
      "Arn": "arn:aws:controlcatalog:::domain/d4msesd9vvmzmmuvlv06m92uq",
      "Name": "Asset management"
    }
  }

```

```
    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Asset lifecycle management"
  }, {
    "Arn": "arn:aws:controlcatalog::objective/ags5wgkyvwriix77zegtwhy09",
    "CreateTime": 1.710288E9,
    "Description": "This control objective focuses on preventing asset loss, and
responding to and recovering lost, stolen, or damaged assets to contribute to the
organization's profitability by reducing losses.",
    "Domain": {
      "Arn": "arn:aws:controlcatalog::domain/d4msesd9vvmzmmuv1v06m92uq",
      "Name": "Asset management"
    },
    },
    "LastUpdateTime": 1.710288E9,
    "Name": "Asset loss prevention, response, and recovery"
  ]
}
```


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 AWS Control Catalog 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:

- [AssociatedDomainSummary](#)
- [AssociatedObjectiveSummary](#)
- [CommonControlFilter](#)
- [CommonControlSummary](#)
- [ControlParameter](#)
- [ControlSummary](#)
- [DomainResourceFilter](#)
- [DomainSummary](#)
- [ImplementationDetails](#)
- [ObjectiveFilter](#)
- [ObjectiveResourceFilter](#)
- [ObjectiveSummary](#)
- [RegionConfiguration](#)

AssociatedDomainSummary

A summary of the domain that a common control or an objective belongs to.

Contents

Arn

The Amazon Resource Name (ARN) of the related domain.

Type: String

Length Constraints: Minimum length of 33. Maximum length of 2048.

Pattern: `arn:(aws(?:[-a-z]*)?):controlcatalog:::domain/[0-9a-z]+`

Required: No

Name

The name of the related domain.

Type: String

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

AssociatedObjectiveSummary

A summary of the objective that a common control supports.

Contents

Arn

The Amazon Resource Name (ARN) of the related objective.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 2048.

Pattern: `arn:(aws(?:[-a-z]*)?):controlcatalog:::objective/[0-9a-z]+`

Required: No

Name

The name of the related objective.

Type: String

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

CommonControlFilter

An optional filter that narrows the results to a specific objective.

Contents

Objectives

The objective that's used as filter criteria.

You can use this parameter to specify one objective ARN at a time. Passing multiple ARNs in the `CommonControlFilter` isn't currently supported.

Type: Array of [ObjectiveResourceFilter](#) objects

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

CommonControlSummary

A summary of metadata for a common control.

Contents

Arn

The Amazon Resource Name (ARN) that identifies the common control.

Type: String

Length Constraints: Minimum length of 41. Maximum length of 2048.

Pattern: `arn:(aws(?:[-a-z]*)?):controlcatalog:::common-control/[0-9a-z]+`

Required: Yes

CreateTime

The time when the common control was created.

Type: Timestamp

Required: Yes

Description

The description of the common control.

Type: String

Required: Yes

Domain

The domain that the common control belongs to.

Type: [AssociatedDomainSummary](#) object

Required: Yes

LastUpdateTime

The time when the common control was most recently updated.

Type: Timestamp

Required: Yes

Name

The name of the common control.

Type: String

Required: Yes

Objective

The objective that the common control belongs to.

Type: [AssociatedObjectiveSummary](#) object

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](#)

ControlParameter

Four types of control parameters are supported.

- **AllowedRegions:** List of AWS Regions exempted from the control. Each string is expected to be an AWS Region code. This parameter is mandatory for the **OU Region deny** control, **CT.MULTISERVICE.PV.1**.

Example: ["us-east-1", "us-west-2"]

- **ExemptedActions:** List of AWS IAM actions exempted from the control. Each string is expected to be an IAM action.

Example:

["logs:DescribeLogGroups", "logs:StartQuery", "logs:GetQueryResults"]

- **ExemptedPrincipalArns:** List of AWS IAM principal ARNs exempted from the control. Each string is expected to be an IAM principal that follows the pattern `^arn:(aws|aws-us-gov):(iam|sts)::.+::+$`

Example: ["arn:aws:iam::*:role/ReadOnly", "arn:aws:sts::*:assumed-role/ReadOnly/*"]

- **ExemptedResourceArns:** List of resource ARNs exempted from the control. Each string is expected to be a resource ARN.

Example: ["arn:aws:s3:::my-bucket-name"]

Contents

Name

The parameter name. This name is the parameter key when you call [EnableControl](#) or [UpdateEnabledControl](#).

Type: String

Required: Yes

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ControlSummary

Overview of information about a control.

Contents

Arn

The Amazon Resource Name (ARN) of the control.

Type: String

Length Constraints: Minimum length of 34. Maximum length of 2048.

Pattern: `arn:(aws(?:[-a-z]*)?):(controlcatalog|controltower):[a-zA-Z0-9-]*::control/[0-9a-zA-Z_\-]+`

Required: Yes

Description

A description of the control, as it may appear in the console. Describes the functionality of the control.

Type: String

Required: Yes

Name

The display name of the control.

Type: String

Required: Yes

See Also

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

- [AWS SDK for C++](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

DomainResourceFilter

The domain resource that's being used as a filter.

Contents

Arn

The Amazon Resource Name (ARN) of the domain.

Type: String

Length Constraints: Minimum length of 33. Maximum length of 2048.

Pattern: `arn:(aws(?:[-a-z]*)?):controlcatalog:::domain/[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](#)

DomainSummary

A summary of metadata for a domain.

Contents

Arn

The Amazon Resource Name (ARN) that identifies the domain.

Type: String

Length Constraints: Minimum length of 33. Maximum length of 2048.

Pattern: `arn:(aws(?:[-a-z]*)?):controlcatalog:::domain/[0-9a-z]+`

Required: Yes

CreateTime

The time when the domain was created.

Type: Timestamp

Required: Yes

Description

The description of the domain.

Type: String

Required: Yes

LastUpdateTime

The time when the domain was most recently updated.

Type: Timestamp

Required: Yes

Name

The name of the domain.

Type: String

Required: Yes

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ImplementationDetails

An object that describes the implementation type for a control.

Our ImplementationDetails Type format has three required segments:

- SERVICE-PROVIDER::SERVICE-NAME::RESOURCE-NAME

For example, `AWS::Config::ConfigRule` or `AWS::SecurityHub::SecurityControl` resources have the format with three required segments.

Our ImplementationDetails Type format has an optional fourth segment, which is present for applicable implementation types. The format is as follows:

- SERVICE-PROVIDER::SERVICE-NAME::RESOURCE-NAME::RESOURCE-TYPE-DESCRIPTION

For example, `AWS::Organizations::Policy::SERVICE_CONTROL_POLICY` or `AWS::CloudFormation::Type::HOOK` have the format with four segments.

Although the format is similar, the values for the Type field do not match any AWS CloudFormation values.

Contents

Type

A string that describes a control's implementation type.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 2048.

Pattern: `[A-Za-z0-9]+(::[A-Za-z0-9_]+){2,3}`

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](#)

ObjectiveFilter

An optional filter that narrows the list of objectives to a specific domain.

Contents

Domains

The domain that's used as filter criteria.

You can use this parameter to specify one domain ARN at a time. Passing multiple ARNs in the `ObjectiveFilter` isn't currently supported.

Type: Array of [DomainResourceFilter](#) objects

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ObjectiveResourceFilter

The objective resource that's being used as a filter.

Contents

Arn

The Amazon Resource Name (ARN) of the objective.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 2048.

Pattern: `arn:(aws(?:[-a-z]*)?):controlcatalog:::objective/[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](#)

ObjectiveSummary

A summary of metadata for an objective.

Contents

Arn

The Amazon Resource Name (ARN) that identifies the objective.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 2048.

Pattern: `arn:(aws(?:[-a-z]*)?):controlcatalog:::objective/[0-9a-z]+`

Required: Yes

CreateTime

The time when the objective was created.

Type: Timestamp

Required: Yes

Description

The description of the objective.

Type: String

Required: Yes

Domain

The domain that the objective belongs to.

Type: [AssociatedDomainSummary](#) object

Required: Yes

LastUpdateTime

The time when the objective was most recently updated.

Type: Timestamp

Required: Yes

Name

The name of the objective.

Type: String

Required: Yes

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

RegionConfiguration

Returns information about the control, including the scope of the control, if enabled, and the Regions in which the control currently is available for deployment. For more information about scope, see [Global services](#).

If you are applying controls through an AWS Control Tower landing zone environment, remember that the values returned in the `RegionConfiguration` API operation are not related to the governed Regions in your landing zone. For example, if you are governing Regions A,B,and C while the control is available in Regions A, B, C, and D, you'd see a response with `DeployableRegions` of A, B, C, and D for a control with `REGIONAL` scope, even though you may not intend to deploy the control in Region D, because you do not govern it through your landing zone.

Contents

Scope

The coverage of the control, if deployed. `Scope` is an enumerated type, with value `Regional`, or `Global`. A control with `Global` scope is effective in all AWS Regions, regardless of the Region from which it is enabled, or to which it is deployed. A control implemented by an SCP is usually `Global` in scope. A control with `Regional` scope has operations that are restricted specifically to the Region from which it is enabled and to which it is deployed. Controls implemented by Config rules and CloudFormation hooks usually are `Regional` in scope. Security Hub controls usually are `Regional` in scope.

Type: String

Valid Values: GLOBAL | REGIONAL

Required: Yes

DeployableRegions

Regions in which the control is available to be deployed.

Type: Array of strings

Pattern: `[a-zA-Z0-9-]{1,128}`

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: 403

ExpiredTokenException

The security token included in the request is expired

HTTP Status Code: 403

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 403

InternalFailure

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

HTTP Status Code: 500

MalformedHttpRequestException

Problems with the request at the HTTP level, e.g. we can't decompress the body according to the decompression algorithm specified by the content-encoding.

HTTP Status Code: 400

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 401

OptInRequired

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

HTTP Status Code: 403

RequestAbortedException

Convenient exception that can be used when a request is aborted before a reply is sent back (e.g. client closed connection).

HTTP Status Code: 400

RequestEntityTooLargeException

Problems with the request at the HTTP level. The request entity is too large.

HTTP Status Code: 413

RequestExpired

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

HTTP Status Code: 400

RequestTimeoutException

Problems with the request at the HTTP level. Reading the Request timed out.

HTTP Status Code: 408

ServiceUnavailable

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

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

UnrecognizedClientException

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

HTTP Status Code: 403

UnknownOperationException

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

HTTP Status Code: 404

ValidationError

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

HTTP Status Code: 400