API Reference

AWS Cloud Control API



API Version 2021-09-30

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AWS Cloud Control API: API Reference

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Table of Contents

Welcome **1**
Actions **2**
CancelResourceRequest 3
Request Syntax 3
Request Parameters 3
Response Syntax 3
Response Elements 4
Errors 4
See Also 4
CreateResource 6
Request Syntax 6
Request Parameters 6
Response Syntax 8
Response Elements 9
Errors 9
Examples 12
See Also 13
DeleteResource 15
Request Syntax 15
Request Parameters 15
Response Syntax 17
Response Elements 18
Errors 18
See Also 21
GetResource 22
Request Syntax 22
Request Parameters 22
Response Syntax 24
Response Elements 24
Errors 24
Examples 27
See Also 28
GetResourceRequestStatus 29
Request Syntax 29

Request Parameters ... 29
Response Syntax ... 29
Response Elements ... 30
Errors ... 30
Examples ... 31
See Also ... 32
ListResourceRequests ... 33
Request Syntax ... 33
Request Parameters ... 33
Response Syntax ... 34
Response Elements ... 35
Errors ... 35
Examples ... 35
See Also ... 38
ListResources ... 39
Request Syntax ... 39
Request Parameters ... 39
Response Syntax ... 41
Response Elements ... 41
Errors ... 42
Examples ... 45
See Also ... 46
UpdateResource ... 47
Request Syntax ... 47
Request Parameters ... 47
Response Syntax ... 50
Response Elements ... 50
Errors ... 50
Examples ... 53
See Also ... 54
Data Types ... 56
HookProgressEvent ... 57
Contents ... 57
See Also ... 59
ProgressEvent ... 60
Contents ... 60

See Also 63
ResourceDescription 64
Contents 64
See Also 64
ResourceRequestStatusFilter 65
Contents 65
See Also 65
Common Parameters 67
Common Error Types 70

Welcome

This is the API Reference for AWS Cloud Control API. With Cloud Control API, you can create, read, update, delete, and list (CRUD-L) your cloud resources that belong to AWS and third-party services. With the Cloud Control API standardized set of application programming interfaces (APIs), you can perform CRUD-L operations on any supported resources in your AWS account. Using Cloud Control API, you won't have to generate code or scripts specific to each individual service responsible for those resources.

For more information, see the AWS Cloud Control API User Guide.

This document was last published on November 14, 2026.

Actions

The following actions are supported:

- CancelResourceRequest
- CreateResource
- DeleteResource
- GetResource
- GetResourceRequestStatus
- ListResourceRequests
- ListResources
- UpdateResource

CancelResourceRequest

Cancels the specified resource operation request. For more information, see Canceling resource operation requests in the *AWS Cloud Control API User Guide*.

Only resource operations requests with a status of `PENDING` or `IN_PROGRESS` can be canceled.

Request Syntax

```
{
   "RequestToken": "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.

RequestToken

The `RequestToken` of the `ProgressEvent` object returned by the resource operation request.

Type: String

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

Pattern: `[-A-Za-z0-9+/=]+`

Required: Yes

Response Syntax

```
{
   "ProgressEvent": {
      "ErrorCode": "string",
      "EventTime": number,
      "HooksRequestToken": "string",
      "Identifier": "string",
      "Operation": "string",
```

```
      "OperationStatus": "string",
      "RequestToken": "string",
      "ResourceModel": "string",
      "RetryAfter": number,
      "StatusMessage": "string",
      "TypeName": "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.

ProgressEvent

Represents the current status of a resource operation request.

Type: ProgressEvent object

Errors

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

ConcurrentModificationException

The resource is currently being modified by another operation.

HTTP Status Code: 500

RequestTokenNotFoundException

A resource operation with the specified request token can't be found.

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

CreateResource

Creates the specified resource. For more information, see Creating a resource in the *AWS Cloud Control API User Guide*.

After you have initiated a resource creation request, you can monitor the progress of your request by calling GetResourceRequestStatus using the `RequestToken` of the `ProgressEvent` type returned by `CreateResource`.

Request Syntax

```
{
   "ClientToken": "string",
   "DesiredState": "string",
   "RoleArn": "string",
   "TypeName": "string",
   "TypeVersionId": "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 identifier to ensure the idempotency of the resource request. As a best practice, specify this token to ensure idempotency, so that AWS Cloud Control API can accurately distinguish between request retries and new resource requests. You might retry a resource request to ensure that it was successfully received.

A client token is valid for 36 hours once used. After that, a resource request with the same client token is treated as a new request.

If you do not specify a client token, one is generated for inclusion in the request.

For more information, see Ensuring resource operation requests are unique in the *AWS Cloud Control API User Guide*.

Type: String

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

Pattern: `[-A-Za-z0-9+/=]+`

Required: No

DesiredState

Structured data format representing the desired state of the resource, consisting of that resource's properties and their desired values.

> **Note**
>
> Cloud Control API currently supports JSON as a structured data format.

Specify the desired state as one of the following:

- A JSON blob
- A local path containing the desired state in JSON data format

For more information, see Composing the desired state of the resource in the *AWS Cloud Control API User Guide*.

For more information about the properties of a specific resource, refer to the related topic for the resource in the Resource and property types reference in the *AWS CloudFormation Template Reference*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 262144.

Pattern: `[\s\S]*`

Required: Yes

RoleArn

The Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role for Cloud Control API to use when performing this resource operation. The role specified must have the permissions required for this operation. The necessary permissions for each event handler are defined in the `handlers` section of the resource type definition schema.

If you do not specify a role, Cloud Control API uses a temporary session created using your AWS user credentials.

For more information, see Specifying credentials in the *AWS Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:.+:iam::[0-9]{12}:role/.+`

Required: No

TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Required: Yes

TypeVersionId

For private resource types, the type version to use in this resource operation. If you do not specify a resource version, CloudFormation uses the default version.

Type: String

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

Pattern: `[A-Za-z0-9-]+`

Required: No

Response Syntax

```
{
   "ProgressEvent": {
      "ErrorCode": "string",
```

```
      "EventTime": number,
      "HooksRequestToken": "string",
      "Identifier": "string",
      "Operation": "string",
      "OperationStatus": "string",
      "RequestToken": "string",
      "ResourceModel": "string",
      "RetryAfter": number,
      "StatusMessage": "string",
      "TypeName": "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.

ProgressEvent

Represents the current status of the resource creation request.

After you have initiated a resource creation request, you can monitor the progress of your request by calling GetResourceRequestStatus using the `RequestToken` of the `ProgressEvent` returned by `CreateResource`.

Type: ProgressEvent object

Errors

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

AlreadyExistsException

The resource with the name requested already exists.

HTTP Status Code: 400

ClientTokenConflictException

The specified client token has already been used in another resource request.

It's best practice for client tokens to be unique for each resource operation request. However, client token expire after 36 hours.

HTTP Status Code: 400

ConcurrentOperationException

Another resource operation is currently being performed on this resource.

HTTP Status Code: 400

GeneralServiceException

The resource handler has returned that the downstream service generated an error that doesn't map to any other handler error code.

HTTP Status Code: 400

HandlerFailureException

The resource handler has failed without a returning a more specific error code. This can include timeouts.

HTTP Status Code: 500

HandlerInternalFailureException

The resource handler has returned that an unexpected error occurred within the resource handler.

HTTP Status Code: 500

InvalidCredentialsException

The resource handler has returned that the credentials provided by the user are invalid.

HTTP Status Code: 400

InvalidRequestException

The resource handler has returned that invalid input from the user has generated a generic exception.

HTTP Status Code: 400

NetworkFailureException

The resource handler has returned that the request couldn't be completed due to networking issues, such as a failure to receive a response from the server.

HTTP Status Code: 500

NotStabilizedException

The resource handler has returned that the downstream resource failed to complete all of its ready-state checks.

HTTP Status Code: 400

NotUpdatableException

One or more properties included in this resource operation are defined as create-only, and therefore can't be updated.

HTTP Status Code: 400

PrivateTypeException

Cloud Control API hasn't received a valid response from the resource handler, due to a configuration error. This includes issues such as the resource handler returning an invalid response, or timing out.

HTTP Status Code: 400

ResourceConflictException

The resource is temporarily unavailable to be acted upon. For example, if the resource is currently undergoing an operation and can't be acted upon until that operation is finished.

HTTP Status Code: 400

ResourceNotFoundException

A resource with the specified identifier can't be found.

HTTP Status Code: 400

ServiceInternalErrorException

The resource handler has returned that the downstream service returned an internal error, typically with a 5XX HTTP status code.

HTTP Status Code: 500

ServiceLimitExceededException

The resource handler has returned that a non-transient resource limit was reached on the service side.

HTTP Status Code: 400

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

TypeNotFoundException

The specified extension doesn't exist in the CloudFormation registry.

HTTP Status Code: 400

UnsupportedActionException

The specified resource doesn't support this resource operation.

HTTP Status Code: 400

Examples

CreateResource

The following example creates a resource of type AWS::Logs::LogGroup named `LogGroupResourceExample` and with a retention policy of 90 days.

Sample Request

```
https://cloudcontrolapi.us-east-1.amazonaws.com/
 ?Action=CreateResource
 &TypeName=AWS::Logs::LogGroup
 &DesiredState={"LogGroupName": "LogGroupResourceExample","RetentionInDays":90}
 &Version=2021-09-30
 &X-Amz-Algorithm=AWS4-HMAC-SHA256
 &X-Amz-Credential=[Access key ID and scope]
 &X-Amz-Date=20250316T233349Z
```

```
 &X-Amz-SignedHeaders=content-type;host
 &X-Amz-Signature=[Signature]
```

Sample Response

```
<CreateResourceResponse xmlns="http://cloudcontrol.amazonaws.com/doc/2021-09-30/">
  <CreateResourceResult>
    <ProgressEvent>
      <Identifier>CloudApiLogGroup</Identifier>
      <OperationStatus>IN_PROGRESS</OperationStatus>
      <EventTime>2025-02-27T18:07:16.468Z</EventTime>
      <TypeName>AWS::Logs::LogGroup</TypeName>
      <RequestToken>f2fcf5a1-7f17-4c7a-b67f-ab0123456789</RequestToken>
      <Operation>CREATE</Operation>
    </ProgressEvent>
  </CreateResourceResult>
  <ResponseMetadata>
    <RequestId>d995ea2f-446c-4688-8656-573123456789</RequestId>
  </ResponseMetadata>
</CreateResourceResponse>
```

See Also

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

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

DeleteResource

Deletes the specified resource. For details, see Deleting a resource in the *AWS Cloud Control API User Guide*.

After you have initiated a resource deletion request, you can monitor the progress of your request by calling GetResourceRequestStatus using the `RequestToken` of the `ProgressEvent` returned by `DeleteResource`.

Request Syntax

```
{
   "ClientToken": "string",
   "Identifier": "string",
   "RoleArn": "string",
   "TypeName": "string",
   "TypeVersionId": "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 identifier to ensure the idempotency of the resource request. As a best practice, specify this token to ensure idempotency, so that AWS Cloud Control API can accurately distinguish between request retries and new resource requests. You might retry a resource request to ensure that it was successfully received.

A client token is valid for 36 hours once used. After that, a resource request with the same client token is treated as a new request.

If you do not specify a client token, one is generated for inclusion in the request.

For more information, see Ensuring resource operation requests are unique in the *AWS Cloud Control API User Guide*.

Type: String

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

Pattern: `[-A-Za-z0-9+/=]+`

Required: No

Identifier

The identifier for the resource.

You can specify the primary identifier, or any secondary identifier defined for the resource type in its resource schema. You can only specify one identifier. Primary identifiers can be specified as a string or JSON; secondary identifiers must be specified as JSON.

For compound primary identifiers (that is, one that consists of multiple resource properties strung together), to specify the primary identifier as a string, list the property values *in the order they are specified* in the primary identifier definition, separated by `|`.

For more information, see Identifying resources in the *AWS Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `.+`

Required: Yes

RoleArn

The Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role for Cloud Control API to use when performing this resource operation. The role specified must have the permissions required for this operation. The necessary permissions for each event handler are defined in the `handlers` section of the resource type definition schema.

If you do not specify a role, Cloud Control API uses a temporary session created using your AWS user credentials.

For more information, see Specifying credentials in the *AWS Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:.+:iam::[0-9]{12}:role/.+`

Required: No

TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Required: Yes

TypeVersionId

For private resource types, the type version to use in this resource operation. If you do not specify a resource version, CloudFormation uses the default version.

Type: String

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

Pattern: `[A-Za-z0-9-]+`

Required: No

Response Syntax

```
{
   "ProgressEvent": {
      "ErrorCode": "string",
      "EventTime": number,
      "HooksRequestToken": "string",
      "Identifier": "string",
      "Operation": "string",
      "OperationStatus": "string",
      "RequestToken": "string",
      "ResourceModel": "string",
      "RetryAfter": number,
      "StatusMessage": "string",
```

```
        "TypeName": "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.

ProgressEvent

Represents the current status of the resource deletion request.

After you have initiated a resource deletion request, you can monitor the progress of your request by calling GetResourceRequestStatus using the `RequestToken` of the `ProgressEvent` returned by `DeleteResource`.

Type: ProgressEvent object

Errors

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

AlreadyExistsException

The resource with the name requested already exists.

HTTP Status Code: 400

ClientTokenConflictException

The specified client token has already been used in another resource request.

It's best practice for client tokens to be unique for each resource operation request. However, client token expire after 36 hours.

HTTP Status Code: 400

ConcurrentOperationException

Another resource operation is currently being performed on this resource.

HTTP Status Code: 400

GeneralServiceException

The resource handler has returned that the downstream service generated an error that doesn't map to any other handler error code.

HTTP Status Code: 400

HandlerFailureException

The resource handler has failed without a returning a more specific error code. This can include timeouts.

HTTP Status Code: 500

HandlerInternalFailureException

The resource handler has returned that an unexpected error occurred within the resource handler.

HTTP Status Code: 500

InvalidCredentialsException

The resource handler has returned that the credentials provided by the user are invalid.

HTTP Status Code: 400

InvalidRequestException

The resource handler has returned that invalid input from the user has generated a generic exception.

HTTP Status Code: 400

NetworkFailureException

The resource handler has returned that the request couldn't be completed due to networking issues, such as a failure to receive a response from the server.

HTTP Status Code: 500

NotStabilizedException

The resource handler has returned that the downstream resource failed to complete all of its ready-state checks.

HTTP Status Code: 400

NotUpdatableException

One or more properties included in this resource operation are defined as create-only, and therefore can't be updated.

HTTP Status Code: 400

PrivateTypeException

Cloud Control API hasn't received a valid response from the resource handler, due to a configuration error. This includes issues such as the resource handler returning an invalid response, or timing out.

HTTP Status Code: 400

ResourceConflictException

The resource is temporarily unavailable to be acted upon. For example, if the resource is currently undergoing an operation and can't be acted upon until that operation is finished.

HTTP Status Code: 400

ResourceNotFoundException

A resource with the specified identifier can't be found.

HTTP Status Code: 400

ServiceInternalErrorException

The resource handler has returned that the downstream service returned an internal error, typically with a 5XX HTTP status code.

HTTP Status Code: 500

ServiceLimitExceededException

The resource handler has returned that a non-transient resource limit was reached on the service side.

HTTP Status Code: 400

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

TypeNotFoundException

The specified extension doesn't exist in the CloudFormation registry.

HTTP Status Code: 400

UnsupportedActionException

The specified resource doesn't support this resource operation.

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

GetResource

Returns information about the current state of the specified resource. For details, see Reading a resource's current state.

You can use this action to return information about an existing resource in your account and AWS Region, whether those resources were provisioned using Cloud Control API.

Request Syntax

```
{
   "Identifier": "string",
   "RoleArn": "string",
   "TypeName": "string",
   "TypeVersionId": "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.

Identifier

The identifier for the resource.

You can specify the primary identifier, or any secondary identifier defined for the resource type in its resource schema. You can only specify one identifier. Primary identifiers can be specified as a string or JSON; secondary identifiers must be specified as JSON.

For compound primary identifiers (that is, one that consists of multiple resource properties strung together), to specify the primary identifier as a string, list the property values *in the order they are specified* in the primary identifier definition, separated by `|`.

For more information, see Identifying resources in the *AWS Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `.+`

Required: Yes

RoleArn

The Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role for Cloud Control API to use when performing this resource operation. The role specified must have the permissions required for this operation. The necessary permissions for each event handler are defined in the `handlers` section of the resource type definition schema.

If you do not specify a role, Cloud Control API uses a temporary session created using your AWS user credentials.

For more information, see Specifying credentials in the *AWS Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:.+:iam::[0-9]{12}:role/.+`

Required: No

TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Required: Yes

TypeVersionId

For private resource types, the type version to use in this resource operation. If you do not specify a resource version, CloudFormation uses the default version.

Type: String

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

Pattern: `[A-Za-z0-9-]+`

Required: No

Response Syntax

```
{
   "ResourceDescription": {
      "Identifier": "string",
      "Properties": "string"
   },
   "TypeName": "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.

ResourceDescription

Represents information about a provisioned resource.

Type: ResourceDescription object

TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Errors

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

AlreadyExistsException

The resource with the name requested already exists.

HTTP Status Code: 400

GeneralServiceException

The resource handler has returned that the downstream service generated an error that doesn't map to any other handler error code.

HTTP Status Code: 400

HandlerFailureException

The resource handler has failed without a returning a more specific error code. This can include timeouts.

HTTP Status Code: 500

HandlerInternalFailureException

The resource handler has returned that an unexpected error occurred within the resource handler.

HTTP Status Code: 500

InvalidCredentialsException

The resource handler has returned that the credentials provided by the user are invalid.

HTTP Status Code: 400

InvalidRequestException

The resource handler has returned that invalid input from the user has generated a generic exception.

HTTP Status Code: 400

NetworkFailureException

The resource handler has returned that the request couldn't be completed due to networking issues, such as a failure to receive a response from the server.

HTTP Status Code: 500

NotStabilizedException

The resource handler has returned that the downstream resource failed to complete all of its ready-state checks.

HTTP Status Code: 400

NotUpdatableException

One or more properties included in this resource operation are defined as create-only, and therefore can't be updated.

HTTP Status Code: 400

PrivateTypeException

Cloud Control API hasn't received a valid response from the resource handler, due to a configuration error. This includes issues such as the resource handler returning an invalid response, or timing out.

HTTP Status Code: 400

ResourceConflictException

The resource is temporarily unavailable to be acted upon. For example, if the resource is currently undergoing an operation and can't be acted upon until that operation is finished.

HTTP Status Code: 400

ResourceNotFoundException

A resource with the specified identifier can't be found.

HTTP Status Code: 400

ServiceInternalErrorException

The resource handler has returned that the downstream service returned an internal error, typically with a 5XX HTTP status code.

HTTP Status Code: 500

ServiceLimitExceededException

The resource handler has returned that a non-transient resource limit was reached on the service side.

HTTP Status Code: 400

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

TypeNotFoundException

The specified extension doesn't exist in the CloudFormation registry.

HTTP Status Code: 400

UnsupportedActionException

The specified resource doesn't support this resource operation.

HTTP Status Code: 400

Examples

GetResource

The following example uses the type name and primary identifier of a resource to return summary information about the resource.

Sample Request

```
https://cloudcontrolapi.us-east-1.amazonaws.com/
 ?Action=GetResource
 &TypeName=AWS::Logs::LogGroup
 &Identifier=LogGroupResourceExample
 &Version=2021-09-30
 &X-Amz-Algorithm=AWS4-HMAC-SHA256
 &X-Amz-Credential=[Access key ID and scope]
 &X-Amz-Date=20250316T233349Z
 &X-Amz-SignedHeaders=content-type;host
 &X-Amz-Signature=[Signature]
```

Sample Response

```
<GetResourceResponse xmlns="http://cloudcontrol.amazonaws.com/doc/2021-09-30/">
  <GetResourceResult>
    <TypeName>AWS::Logs::LogGroup</TypeName>
    <ResourceDescription>

 <ResourceModel>{"RetentionInDays":90,"LogGroupName":"LogGroupResourceExample","Arn":"arn:aws:l
west-2:090123456789:log-group:LogGroupResourceExample:*"}</ResourceModel>
```

```
      <Identifier>LogGroupResourceExample</Identifier>
    </ResourceDescription>
  </GetResourceResult>
  <ResponseMetadata>
    <RequestId>9277ff54-d56e-4a29-95af-b10123456789</RequestId>
  </ResponseMetadata>
</GetResourceResponse>
```

See Also

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

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

GetResourceRequestStatus

Returns the current status of a resource operation request. For more information, see Tracking the progress of resource operation requests in the *AWS Cloud Control API User Guide*.

Request Syntax

```
{
   "RequestToken": "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.

RequestToken

A unique token used to track the progress of the resource operation request.

Request tokens are included in the `ProgressEvent` type returned by a resource operation request.

Type: String

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

Pattern: `[-A-Za-z0-9+/=]+`

Required: Yes

Response Syntax

```
{
   "HooksProgressEvent": [
      {
         "FailureMode": "string",
         "HookEventTime": number,
         "HookStatus": "string",
         "HookStatusMessage": "string",
```

```
            "HookTypeArn": "string",
            "HookTypeName": "string",
            "HookTypeVersionId": "string",
            "InvocationPoint": "string"
        }
    ],
    "ProgressEvent": {
        "ErrorCode": "string",
        "EventTime": number,
        "HooksRequestToken": "string",
        "Identifier": "string",
        "Operation": "string",
        "OperationStatus": "string",
        "RequestToken": "string",
        "ResourceModel": "string",
        "RetryAfter": number,
        "StatusMessage": "string",
        "TypeName": "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.

HooksProgressEvent

Lists Hook invocations for the specified target in the request. This is a list since the same target can invoke multiple Hooks.

Type: Array of HookProgressEvent objects

ProgressEvent

Represents the current status of the resource operation request.

Type: ProgressEvent object

Errors

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

RequestTokenNotFoundException

A resource operation with the specified request token can't be found.

HTTP Status Code: 400

Examples

GetResourceRequestStatus

The following example returns the successful completion status of the specified resource creation operation.

Sample Request

```
https://cloudcontrolapi.us-east-1.amazonaws.com/
 ?Action=GetResourceRequestStatus
 &RequestToken=b4a1cc5a-a2ae-4dec-9e1e-150123456789
 &Version=2021-09-30
 &X-Amz-Algorithm=AWS4-HMAC-SHA256
 &X-Amz-Credential=[Access key ID and scope]
 &X-Amz-Date=20250316T233349Z
 &X-Amz-SignedHeaders=content-type;host
 &X-Amz-Signature=[Signature]
```

Sample Response

```
<GetResourceRequestStatusResponse xmlns="http://cloudcontrol.amazonaws.com/
doc/2021-09-30/">
  <GetResourceRequestStatusResult>
    <ProgressEvent>
      <Identifier>LogGroupResourceExample</Identifier>
      <OperationStatus>SUCCESS</OperationStatus>
      <EventTime>2025-02-27T18:52:57.406Z</EventTime>
      <TypeName>AWS::Logs::LogGroup</TypeName>
      <RequestToken>b4a1cc5a-a2ae-4dec-9e1e-150123456789</RequestToken>
      <Operation>CREATE</Operation>
    </ProgressEvent>
  </GetResourceRequestStatusResult>
  <ResponseMetadata>
```

```
    <RequestId>620e5d19-0c03-4069-ae3b-9e0123456789</RequestId>
  </ResponseMetadata>
</GetResourceRequestStatusResponse>
```

See Also

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

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

ListResourceRequests

Returns existing resource operation requests. This includes requests of all status types. For more information, see Listing active resource operation requests in the *AWS Cloud Control API User Guide*.

> **Note**
>
> Resource operation requests expire after 7 days.

Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string",
   "ResourceRequestStatusFilter": {
      "Operations": [ "string" ],
      "OperationStatuses": [ "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

The maximum number of results to be returned with a single call. If the number of available results exceeds this maximum, the response includes a `NextToken` value that you can assign to the `NextToken` request parameter to get the next set of results.

The default is `20`.

Type: Integer

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

Required: No

NextToken

If the previous paginated request didn't return all of the remaining results, the response object's `NextToken` parameter value is set to a token. To retrieve the next set of results, call this action again and assign that token to the request object's `NextToken` parameter. If there are no remaining results, the previous response object's `NextToken` parameter is set to `null`.

Type: String

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

Pattern: `[-A-Za-z0-9+/=]+`

Required: No

ResourceRequestStatusFilter

The filter criteria to apply to the requests returned.

Type: ResourceRequestStatusFilter object

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "ResourceRequestStatusSummaries": [
      {
         "ErrorCode": "string",
         "EventTime": number,
         "HooksRequestToken": "string",
         "Identifier": "string",
         "Operation": "string",
         "OperationStatus": "string",
         "RequestToken": "string",
         "ResourceModel": "string",
         "RetryAfter": number,
         "StatusMessage": "string",
         "TypeName": "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

If the request doesn't return all of the remaining results, `NextToken` is set to a token. To retrieve the next set of results, call `ListResources` again and assign that token to the request object's `NextToken` parameter. If the request returns all results, `NextToken` is set to null.

Type: String

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

Pattern: `[-A-Za-z0-9+/=]+`

ResourceRequestStatusSummaries

The requests that match the specified filter criteria.

Type: Array of ProgressEvent objects

Errors

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

Examples

ListResourceRequests

The following example returns all current resource requests. In this case, this includes a successful `create` and `update` of a resource, in addition to a `create` operation that failed because a resource of the specified name already exists.

Sample Request

```
https://cloudcontrolapi.us-east-1.amazonaws.com/
 ?Action=ListResourceRequests
 &Version=2021-09-30
 &X-Amz-Algorithm=AWS4-HMAC-SHA256
 &X-Amz-Credential=[Access key ID and scope]
 &X-Amz-Date=20250316T233349Z
 &X-Amz-SignedHeaders=content-type;host
 &X-Amz-Signature=[Signature]
```

Sample Response

```
<ListResourceRequestsResponse xmlns="http://cloudcontrol.amazonaws.com/
doc/2021-09-30/">
  <ListResourceRequestsResult>
    <RequestStatusSummaries>
      <member>
        <Identifier>LogGroupResourceExample2</Identifier>
        <OperationStatus>SUCCESS</OperationStatus>
        <TypeName>AWS::Logs::LogGroup</TypeName>
        <EventTime>2025-02-27T19:23:56.094Z</EventTime>
        <RequestToken>6233b409-a77d-4125-85ee-fd0123456789</RequestToken>
        <Operation>UPDATE</Operation>
      </member>
      <member>
        <Identifier>LogGroupResourceExample2</Identifier>
        <OperationStatus>SUCCESS</OperationStatus>
        <TypeName>AWS::Logs::LogGroup</TypeName>
        <EventTime>2025-02-27T18:01:42.788Z</EventTime>
        <RequestToken>71d8afe7-7e83-4136-92f6-420123456789</RequestToken>
        <Operation>CREATE</Operation>
      </member>
      <member>
        <Identifier>LogGroupResourceExample</Identifier>
        <OperationStatus>SUCCESS</OperationStatus>
        <TypeName>AWS::Logs::LogGroup</TypeName>
        <EventTime>2025-02-27T18:52:57.406Z</EventTime>
        <RequestToken>b4a1cc5a-a2ae-4dec-9e1e-150123456789</RequestToken>
        <Operation>CREATE</Operation>
      </member>
      <member>
        <Identifier>LogGroupResourceExample2</Identifier>
        <OperationStatus>FAILED</OperationStatus>
        <TypeName>AWS::Logs::LogGroup</TypeName>
```

```
        <EventTime>2025-02-27T18:07:17.005Z</EventTime>
        <ErrorCode>AlreadyExists</ErrorCode>
        <RequestToken>f2fcf5a1-7f17-4c7a-b67f-ab0123456789</RequestToken>
        <Operation>CREATE</Operation>
        <StatusMessage>Resource of type 'AWS::Logs::LogGroup' with identifier '{"/
properties/LogGroupName":"LogGroupResourceExample2"}' already exists.</StatusMessage>
      </member>
    </RequestStatusSummaries>
  </ListResourceRequestsResult>
```

Filtering ListResourceRequests

The following example returns only the current resource requests for `create` and `update` operations that have failed.

Sample Request

```
https://cloudcontrolapi.us-east-1.amazonaws.com/
 ?Action=ListResourceRequests
 &RequestStatusFilter.OperationStatuses.member.1=FAILED
 &RequestStatusFilter.Operations.member.1=CREATE
 &RequestStatusFilter.Operations.member.2=UPDATE
 &Version=2021-09-30
 &X-Amz-Algorithm=AWS4-HMAC-SHA256
 &X-Amz-Credential=[Access key ID and scope]
 &X-Amz-Date=20250316T233349Z
 &X-Amz-SignedHeaders=content-type;host
 &X-Amz-Signature=[Signature]
```

Sample Response

```
<ListResourceRequestsResponse xmlns="http://cloudcontrol.amazonaws.com/
doc/2021-09-30/">
  <ListResourceRequestsResult>
    <RequestStatusSummaries>
      <member>
        <Identifier>LogGroupResourceExample</Identifier>
        <OperationStatus>FAILED</OperationStatus>
        <EventTime>2025-02-27T18:07:17.005Z</EventTime>
        <TypeName>AWS::Logs::LogGroup</TypeName>
        <ErrorCode>AlreadyExists</ErrorCode>
```

```
        <RequestToken>f2fcf5a1-7f17-4c7a-b67f-ab0123456789</RequestToken>
        <Operation>CREATE</Operation>
        <StatusMessage>Resource of type 'AWS::Logs::LogGroup' with identifier '{"/
properties/LogGroupName":"LogGroupResourceExample"}' already exists.</StatusMessage>
      </member>
    </RequestStatusSummaries>
  </ListResourceRequestsResult>
  <ResponseMetadata>
    <RequestId>34748e01-2885-4410-90a6-870123456789</RequestId>
  </ResponseMetadata>
</ListResourceRequestsResponse>
```

See Also

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

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

ListResources

Returns information about the specified resources. For more information, see Discovering resources in the *AWS Cloud Control API User Guide*.

You can use this action to return information about existing resources in your account and AWS Region, whether those resources were provisioned using Cloud Control API.

Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string",
   "ResourceModel": "string",
   "RoleArn": "string",
   "TypeName": "string",
   "TypeVersionId": "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

Reserved.

Type: Integer

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

Required: No

NextToken

If the previous paginated request didn't return all of the remaining results, the response object's `NextToken` parameter value is set to a token. To retrieve the next set of results, call this action again and assign that token to the request object's `NextToken` parameter. If there are no remaining results, the previous response object's `NextToken` parameter is set to `null`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `.+`

Required: No

ResourceModel

The resource model to use to select the resources to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 262144.

Pattern: `[\s\S]*`

Required: No

RoleArn

The Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role for Cloud Control API to use when performing this resource operation. The role specified must have the permissions required for this operation. The necessary permissions for each event handler are defined in the `handlers` section of the resource type definition schema.

If you do not specify a role, Cloud Control API uses a temporary session created using your AWS user credentials.

For more information, see Specifying credentials in the *AWS Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:.+:iam::[0-9]{12}:role/.+`

Required: No

TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Required: Yes

TypeVersionId

For private resource types, the type version to use in this resource operation. If you do not specify a resource version, CloudFormation uses the default version.

Type: String

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

Pattern: `[A-Za-z0-9-]+`

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "ResourceDescriptions": [
      {
         "Identifier": "string",
         "Properties": "string"
      }
   ],
   "TypeName": "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

If the request doesn't return all of the remaining results, `NextToken` is set to a token. To retrieve the next set of results, call `ListResources` again and assign that token to the request object's `NextToken` parameter. If the request returns all results, `NextToken` is set to null.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `.+`

ResourceDescriptions

Information about the specified resources, including primary identifier and resource model.

Type: Array of ResourceDescription objects

TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Errors

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

AlreadyExistsException

The resource with the name requested already exists.

HTTP Status Code: 400

GeneralServiceException

The resource handler has returned that the downstream service generated an error that doesn't map to any other handler error code.

HTTP Status Code: 400

HandlerFailureException

The resource handler has failed without a returning a more specific error code. This can include timeouts.

HTTP Status Code: 500

HandlerInternalFailureException

The resource handler has returned that an unexpected error occurred within the resource handler.

HTTP Status Code: 500

InvalidCredentialsException

The resource handler has returned that the credentials provided by the user are invalid.

HTTP Status Code: 400

InvalidRequestException

The resource handler has returned that invalid input from the user has generated a generic exception.

HTTP Status Code: 400

NetworkFailureException

The resource handler has returned that the request couldn't be completed due to networking issues, such as a failure to receive a response from the server.

HTTP Status Code: 500

NotStabilizedException

The resource handler has returned that the downstream resource failed to complete all of its ready-state checks.

HTTP Status Code: 400

NotUpdatableException

One or more properties included in this resource operation are defined as create-only, and therefore can't be updated.

HTTP Status Code: 400

PrivateTypeException

Cloud Control API hasn't received a valid response from the resource handler, due to a configuration error. This includes issues such as the resource handler returning an invalid response, or timing out.

HTTP Status Code: 400

ResourceConflictException

The resource is temporarily unavailable to be acted upon. For example, if the resource is currently undergoing an operation and can't be acted upon until that operation is finished.

HTTP Status Code: 400

ResourceNotFoundException

A resource with the specified identifier can't be found.

HTTP Status Code: 400

ServiceInternalErrorException

The resource handler has returned that the downstream service returned an internal error, typically with a 5XX HTTP status code.

HTTP Status Code: 500

ServiceLimitExceededException

The resource handler has returned that a non-transient resource limit was reached on the service side.

HTTP Status Code: 400

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

TypeNotFoundException

The specified extension doesn't exist in the CloudFormation registry.

HTTP Status Code: 400

UnsupportedActionException

The specified resource doesn't support this resource operation.

HTTP Status Code: 400

Examples

ListResources

The following example lists all resources of type `AWS::Logs::LogGroup`.

Sample Request

```
https://cloudcontrolapi.us-east-1.amazonaws.com/
 ?Action=ListResources
 &TypeName=AWS::Logs::LogGroup
 &Version=2021-09-30
 &X-Amz-Algorithm=AWS4-HMAC-SHA256
 &X-Amz-Credential=[Access key ID and scope]
 &X-Amz-Date=20250316T233349Z
 &X-Amz-SignedHeaders=content-type;host
 &X-Amz-Signature=[Signature]
```

Sample Response

```
<ListResourcesResponse xmlns="http://cloudcontrol.amazonaws.com/doc/2021-09-30/">
  <ListResourcesResult>
    <TypeName>AWS::Logs::LogGroup</TypeName>
    <ResourceDescriptions>
      <member>
        <ResourceModel>{"LogGroupName":"/aws/mobilehub/
reactnativestarter_676534569","Arn":"arn:aws:logs:us-west-2:090123456789:log-group:/
aws/mobilehub/reactnativestarter_676534569:*"}</ResourceModel>
        <Identifier>/aws/mobilehub/reactnativestarter_0123456789</Identifier>
      </member>
      <member>

 <ResourceModel>{"RetentionInDays":90,"LogGroupName":"CloudApiLogGroup","Arn":"arn:aws:logs:us-
west-2:090123456789:log-group:CloudApiLogGroup:*"}</ResourceModel>
        <Identifier>CloudApiLogGroup</Identifier>
      </member>
      <member>

 <ResourceModel>{"RetentionInDays":90,"LogGroupName":"LogGroupResourceExample","Arn":"arn:aws:l
west-2:090123456789:log-group:LogGroupResourceExample:*"}</ResourceModel>
        <Identifier>LogGroupResourceExample</Identifier>
      </member>
```

```
    </ResourceDescriptions>
  </ListResourcesResult>
  <ResponseMetadata>
    <RequestId>9c4bf1f2-59b3-4231-b349-5f0123456789</RequestId>
  </ResponseMetadata>
</ListResourcesResponse>
```

See Also

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

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

UpdateResource

Updates the specified property values in the resource.

You specify your resource property updates as a list of patch operations contained in a JSON patch document that adheres to the *RFC 6902 - JavaScript Object Notation (JSON) Patch* standard.

For details on how Cloud Control API performs resource update operations, see Updating a resource in the *AWS Cloud Control API User Guide*.

After you have initiated a resource update request, you can monitor the progress of your request by calling GetResourceRequestStatus using the `RequestToken` of the `ProgressEvent` returned by `UpdateResource`.

For more information about the properties of a specific resource, refer to the related topic for the resource in the Resource and property types reference in the *AWS CloudFormation Template Reference*.

Request Syntax

```
{
   "ClientToken": "string",
   "Identifier": "string",
   "PatchDocument": "string",
   "RoleArn": "string",
   "TypeName": "string",
   "TypeVersionId": "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 identifier to ensure the idempotency of the resource request. As a best practice, specify this token to ensure idempotency, so that AWS Cloud Control API can accurately distinguish between request retries and new resource requests. You might retry a resource request to ensure that it was successfully received.

A client token is valid for 36 hours once used. After that, a resource request with the same client token is treated as a new request.

If you do not specify a client token, one is generated for inclusion in the request.

For more information, see Ensuring resource operation requests are unique in the *AWS Cloud Control API User Guide*.

Type: String

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

Pattern: `[-A-Za-z0-9+/=]+`

Required: No

Identifier

The identifier for the resource.

You can specify the primary identifier, or any secondary identifier defined for the resource type in its resource schema. You can only specify one identifier. Primary identifiers can be specified as a string or JSON; secondary identifiers must be specified as JSON.

For compound primary identifiers (that is, one that consists of multiple resource properties strung together), to specify the primary identifier as a string, list the property values *in the order they are specified* in the primary identifier definition, separated by `|`.

For more information, see Identifying resources in the *AWS Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `.+`

Required: Yes

PatchDocument

A JavaScript Object Notation (JSON) document listing the patch operations that represent the updates to apply to the current resource properties. For more information, see Composing the patch document in the *AWS Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 262144.

Pattern: `[\s\S]*`

Required: Yes

RoleArn

The Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role for Cloud Control API to use when performing this resource operation. The role specified must have the permissions required for this operation. The necessary permissions for each event handler are defined in the `handlers` section of the resource type definition schema.

If you do not specify a role, Cloud Control API uses a temporary session created using your AWS user credentials.

For more information, see Specifying credentials in the *AWS Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:.+:iam::[0-9]{12}:role/.+`

Required: No

TypeName

The name of the resource type.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Required: Yes

TypeVersionId

For private resource types, the type version to use in this resource operation. If you do not specify a resource version, CloudFormation uses the default version.

Type: String

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

Pattern: `[A-Za-z0-9-]+`

Required: No

Response Syntax

```
{
   "ProgressEvent": {
      "ErrorCode": "string",
      "EventTime": number,
      "HooksRequestToken": "string",
      "Identifier": "string",
      "Operation": "string",
      "OperationStatus": "string",
      "RequestToken": "string",
      "ResourceModel": "string",
      "RetryAfter": number,
      "StatusMessage": "string",
      "TypeName": "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.

ProgressEvent

Represents the current status of the resource update request.

Use the `RequestToken` of the `ProgressEvent` with GetResourceRequestStatus to return the current status of a resource operation request.

Type: ProgressEvent object

Errors

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

AlreadyExistsException

The resource with the name requested already exists.

HTTP Status Code: 400

ClientTokenConflictException

The specified client token has already been used in another resource request.

It's best practice for client tokens to be unique for each resource operation request. However, client token expire after 36 hours.

HTTP Status Code: 400

ConcurrentOperationException

Another resource operation is currently being performed on this resource.

HTTP Status Code: 400

GeneralServiceException

The resource handler has returned that the downstream service generated an error that doesn't map to any other handler error code.

HTTP Status Code: 400

HandlerFailureException

The resource handler has failed without a returning a more specific error code. This can include timeouts.

HTTP Status Code: 500

HandlerInternalFailureException

The resource handler has returned that an unexpected error occurred within the resource handler.

HTTP Status Code: 500

InvalidCredentialsException

The resource handler has returned that the credentials provided by the user are invalid.

HTTP Status Code: 400

InvalidRequestException

The resource handler has returned that invalid input from the user has generated a generic exception.

HTTP Status Code: 400

NetworkFailureException

The resource handler has returned that the request couldn't be completed due to networking issues, such as a failure to receive a response from the server.

HTTP Status Code: 500

NotStabilizedException

The resource handler has returned that the downstream resource failed to complete all of its ready-state checks.

HTTP Status Code: 400

NotUpdatableException

One or more properties included in this resource operation are defined as create-only, and therefore can't be updated.

HTTP Status Code: 400

PrivateTypeException

Cloud Control API hasn't received a valid response from the resource handler, due to a configuration error. This includes issues such as the resource handler returning an invalid response, or timing out.

HTTP Status Code: 400

ResourceConflictException

The resource is temporarily unavailable to be acted upon. For example, if the resource is currently undergoing an operation and can't be acted upon until that operation is finished.

HTTP Status Code: 400

ResourceNotFoundException

A resource with the specified identifier can't be found.

HTTP Status Code: 400

ServiceInternalErrorException

The resource handler has returned that the downstream service returned an internal error, typically with a 5XX HTTP status code.

HTTP Status Code: 500

ServiceLimitExceededException

The resource handler has returned that a non-transient resource limit was reached on the service side.

HTTP Status Code: 400

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

TypeNotFoundException

The specified extension doesn't exist in the CloudFormation registry.

HTTP Status Code: 400

UnsupportedActionException

The specified resource doesn't support this resource operation.

HTTP Status Code: 400

Examples

UpdateResource

The following example performs two patch operations on the specified resource. The first operation tests to see if the retention policy is set to 3653 days. If this is the case, the second operation updates the retention policy to 90 days.

Sample Request

```
https://cloudcontrolapi.us-east-1.amazonaws.com/
 ?Action=GetResource
 &TypeName=AWS::Logs::LogGroup
 &Identifier=LogGroupResourceExample
 &PatchDocument=[{"op": "test", "path": "RetentionInDays", "value":3653},{"op":
 "replace","path": "RetentionInDays", "value": 90}]
 &Version=2021-09-30
 &X-Amz-Algorithm=AWS4-HMAC-SHA256
 &X-Amz-Credential=[Access key ID and scope]
 &X-Amz-Date=20250316T233349Z
 &X-Amz-SignedHeaders=content-type;host
 &X-Amz-Signature=[Signature]
```

Sample Response

```
<UpdateResourceResponse xmlns="http://cloudcontrol.amazonaws.com/doc/2021-09-30/">
  <UpdateResourceResult>
    <ProgressEvent>
      <Identifier>CloudApiLogGroup</Identifier>
      <OperationStatus>IN_PROGRESS</OperationStatus>
      <TypeName>AWS::Logs::LogGroup</TypeName>
      <EventTime>2025-02-27T19:50:29.241Z</EventTime>
      <ResourceModel>{"RetentionInDays":90,"LogGroupName":"CloudApiLogGroup"}</
ResourceModel>
      <RequestToken>332e531e-3435-434e-82e0-de841ff13b25</RequestToken>
      <Operation>UPDATE</Operation>
    </ProgressEvent>
  </UpdateResourceResult>
  <ResponseMetadata>
    <RequestId>f75ec393-dd7c-4ad4-a3e3-d7b9c8468d86</RequestId>
  </ResponseMetadata>
</UpdateResourceResponse>
```

See Also

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

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

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

Data Types

The AWS Cloud Control API 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:

- HookProgressEvent
- ProgressEvent
- ResourceDescription
- ResourceRequestStatusFilter

HookProgressEvent

Represents the current status of a Hook operation request for the target resource.

For more information about Hooks, see the AWS CloudFormation Hooks User Guide.

Contents

FailureMode

The failure mode of the invocation. The following are the potential statuses:

- `FAIL`: This will fail the Hook invocation and the request associated with it.
- `WARN`: This will fail the Hook invocation, but not the request associated with it.

Type: String

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

Pattern: `[-A-Za-z_]+`

Required: No

HookEventTime

The time that the Hook invocation request initiated.

Type: Timestamp

Required: No

HookStatus

The status of the Hook invocation. The following are potential statuses:

- `HOOK_PENDING`: The Hook was added to the invocation plan, but not yet invoked.
- `HOOK_IN_PROGRESS`: The Hook was invoked, but hasn't completed.
- `HOOK_COMPLETE_SUCCEEDED`: The Hook invocation is complete with a successful result.
- `HOOK_COMPLETE_FAILED`: The Hook invocation is complete with a failed result.
- `HOOK_FAILED`: The Hook invocation didn't complete successfully.

Type: String

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

Pattern: `[-A-Za-z_]+`

Required: No

HookStatusMessage

The message explaining the current Hook status.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `[\s\S]*`

Required: No

HookTypeArn

The ARN of the Hook being invoked.

Type: String

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

Pattern: `arn:aws.*:.+:.*:.*:.+`

Required: No

HookTypeName

The type name of the Hook being invoked.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

Required: No

HookTypeVersionId

The type version of the Hook being invoked.

Type: String

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

Pattern: `[A-Za-z0-9-]+`

Required: No

InvocationPoint

The point in which the Hook is being invoked.

Type: String

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

Pattern: `[-A-Za-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

ProgressEvent

Represents the current status of a resource operation request. For more information, see Managing resource operation requests in the *AWS Cloud Control API User Guide*.

Contents

ErrorCode

For requests with a status of `FAILED`, the associated error code.

For error code definitions, see Handler error codes in the *CloudFormation Command Line Interface User Guide for Extension Development*.

Type: String

Valid Values: `NotUpdatable | InvalidRequest | AccessDenied | UnauthorizedTaggingOperation | InvalidCredentials | AlreadyExists | NotFound | ResourceConflict | Throttling | ServiceLimitExceeded | NotStabilized | GeneralServiceException | ServiceInternalError | ServiceTimeout | NetworkFailure | InternalFailure`

Required: No

EventTime

When the resource operation request was initiated.

Type: Timestamp

Required: No

HooksRequestToken

The unique token representing the Hooks operation for the request.

Type: String

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

Pattern: `[-A-Za-z0-9+/=]+`

Required: No

Identifier

The primary identifier for the resource.

> **Note**
>
> In some cases, the resource identifier may be available before the resource operation has reached a status of SUCCESS.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `.+`

Required: No

Operation

The resource operation type.

Type: String

Valid Values: `CREATE | DELETE | UPDATE`

Required: No

OperationStatus

The current status of the resource operation request.

- `PENDING`: The resource operation hasn't yet started.
- `IN_PROGRESS`: The resource operation is currently in progress.
- `SUCCESS`: The resource operation has successfully completed.
- `FAILED`: The resource operation has failed. Refer to the error code and status message for more information.
- `CANCEL_IN_PROGRESS`: The resource operation is in the process of being canceled.
- `CANCEL_COMPLETE`: The resource operation has been canceled.

Type: String

Valid Values: `PENDING | IN_PROGRESS | SUCCESS | FAILED | CANCEL_IN_PROGRESS | CANCEL_COMPLETE`

Required: No

RequestToken

The unique token representing this resource operation request.

Use the `RequestToken` with GetResourceRequestStatus to return the current status of a resource operation request.

Type: String

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

Pattern: `[-A-Za-z0-9+/=]+`

Required: No

ResourceModel

A JSON string containing the resource model, consisting of each resource property and its current value.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 262144.

Pattern: `[\s\S]*`

Required: No

RetryAfter

When to next request the status of this resource operation request.

Type: Timestamp

Required: No

StatusMessage

Any message explaining the current status.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `[\s\S]*`

Required: No

TypeName

The name of the resource type used in the operation.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 196.

Pattern: `[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}::[A-Za-z0-9]{2,64}`

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

ResourceDescription

Represents information about a provisioned resource.

Contents

Identifier

The primary identifier for the resource.

For more information, see Identifying resources in the *AWS Cloud Control API User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `.+`

Required: No

Properties

A list of the resource properties and their current values.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 262144.

Pattern: `[\s\S]*`

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

ResourceRequestStatusFilter

The filter criteria to use in determining the requests returned.

Contents

Operations

The operation types to include in the filter.

Type: Array of strings

Valid Values: `CREATE | DELETE | UPDATE`

Required: No

OperationStatuses

The operation statuses to include in the filter.

- `PENDING`: The operation has been requested, but not yet initiated.
- `IN_PROGRESS`: The operation is in progress.
- `SUCCESS`: The operation completed.
- `FAILED`: The operation failed.
- `CANCEL_IN_PROGRESS`: The operation is in the process of being canceled.
- `CANCEL_COMPLETE`: The operation has been canceled.

Type: Array of strings

Valid Values: `PENDING | IN_PROGRESS | SUCCESS | FAILED | CANCEL_IN_PROGRESS | CANCEL_COMPLETE`

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*.

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 Error Types

This section lists common error types that this AWS service may return. Not all services return all error types listed here. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You don't have permission to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 403

ExpiredTokenException

The security token included in the request has expired. Request a new security token and try again.

HTTP Status Code: 403

IncompleteSignature

The request signature doesn't conform to AWS standards. Verify that you're using valid AWS credentials and that your request is properly formatted. If you're using an SDK, ensure it's up to date.

HTTP Status Code: 403

InternalFailure

The request can't be processed right now because of an internal server issue. Try again later. If the problem persists, contact AWS Support.

HTTP Status Code: 500

MalformedHttpRequestException

The request body can't be processed. This typically happens when the request body can't be decompressed using the specified content encoding algorithm. Verify that the content encoding header matches the compression format used.

HTTP Status Code: 400

NotAuthorized

You don't have permissions to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 401

OptInRequired

Your AWS account needs a subscription for this service. Verify that you've enabled the service in your account.

HTTP Status Code: 403

RequestAbortedException

The request was aborted before a response could be returned. This typically happens when the client closes the connection.

HTTP Status Code: 400

RequestEntityTooLargeException

The request entity is too large. Reduce the size of the request body and try again.

HTTP Status Code: 413

RequestTimeoutException

The request timed out. The server didn't receive the complete request within the expected time frame. Try again.

HTTP Status Code: 408

ServiceUnavailable

The service is temporarily unavailable. Try again later.

HTTP Status Code: 503

ThrottlingException

Your request rate is too high. The AWS SDKs automatically retry requests that receive this exception. Reduce the frequency of requests.

HTTP Status Code: 400

UnknownOperationException

The action or operation isn't recognized. Verify that the action name is spelled correctly and that it's supported by the API version you're using.

HTTP Status Code: 404

UnrecognizedClientException

The X.509 certificate or AWS access key ID you provided doesn't exist in our records. Verify that you're using valid credentials and that they haven't expired.

HTTP Status Code: 403

ValidationError

The input doesn't meet the required format or constraints. Check that all required parameters are included and that values are valid.

HTTP Status Code: 400