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Welcome

AWS IoT

AWS IoT provides secure, bi-directional communication between Internet-connected devices (such as sensors, actuators, embedded devices, or smart appliances) and the AWS cloud. You can discover your custom IoT-Data endpoint to communicate with, configure rules for data processing and integration with other services, organize resources associated with each device (Registry), configure logging, and create and manage policies and credentials to authenticate devices.

For more information about how AWS IoT works, see the Developer Guide.

AWS IoT Data Plane

AWS IoT-Data enables secure, bi-directional communication between Internet-connected things (such as sensors, actuators, embedded devices, or smart appliances) and the AWS cloud. It implements a broker for applications and things to publish messages over HTTP (Publish) and retrieve, update, and delete shadows. A shadow is a persistent representation of your things and their state in the AWS cloud.

AWS IoT Jobs Data Plane

AWS IoT Jobs is a service that allows you to define a set of jobs — remote operations that are sent to and executed on one or more devices connected to AWS IoT. For example, you can define a job that instructs a set of devices to download and install application or firmware updates, reboot, rotate certificates, or perform remote troubleshooting operations.

To create a job, you make a job document which is a description of the remote operations to be performed, and you specify a list of targets that should perform the operations. The targets can be individual things, thing groups or both.

AWS IoT Jobs sends a message to inform the targets that a job is available. The target starts the execution of the job by downloading the job document, performing the operations it specifies, and reporting its progress to AWS IoT. The Jobs service provides commands to track the progress of a job on a specific target and for all the targets of the job.
Actions

The following actions are supported by AWS IoT:

- AcceptCertificateTransfer (p. 8)
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- AssociateTargetsWithJob (p. 12)
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- AttachPrincipalPolicy (p. 17)
- AttachThingPrincipal (p. 19)
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The following actions are supported by AWS IoT Jobs Data Plane:
AWS IoT

The following actions are supported by AWS IoT:

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AcceptCertificateTransfer
Service: AWS IoT

Accepts a pending certificate transfer. The default state of the certificate is INACTIVE.
To check for pending certificate transfers, call ListCertificates (p. 185) to enumerate your certificates.

Request Syntax

```
PATCH /accept-certificate-transfer/certificateId?setAsActive=setAsActive HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

certificateId (p. 8)
The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)
Length Constraints: Fixed length of 64.
Pattern: (0x)?[a-fA-F0-9]+  
setAsActive (p. 8)
Specifies whether the certificate is active.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404
SenhaServiceUnavailableException
The service is temporarily unavailable.

HTTP Status Code: 503
ThrottlingException
The rate exceeds the limit.

HTTP Status Code: 429
TransferAlreadyCompletedException
You can’t revert the certificate transfer because the transfer is already complete.

HTTP Status Code: 410
UnauthorizedException
You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
AddThingToThingGroup
Service: AWS IoT

Adds a thing to a thing group.

Request Syntax

PUT /thing-groups/addThingToThingGroup HTTP/1.1
Content-type: application/json

{  
  "thingArn": "string",
  "thingGroupArn": "string",
  "thingGroupName": "string",
  "thingName": "string"
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

thingArn (p. 10)

The ARN of the thing to add to a group.

Type: String

Required: No

thingGroupArn (p. 10)

The ARN of the group to which you are adding a thing.

Type: String

Required: No

thingGroupName (p. 10)

The name of the group to which you are adding a thing.

Type: String


Pattern: [a-zA-Z0-9-_:]+

Required: No

thingName (p. 10)

The name of the thing to add to a group.

Type: String

Pattern: \[a-zA-Z0-9:_-]+\n
Required: No

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

`InternalFailureException`

An unexpected error has occurred.

HTTP Status Code: 500

`InvalidRequestException`

The request is not valid.

HTTP Status Code: 400

`ResourceNotFoundException`

The specified resource does not exist.

HTTP Status Code: 404

`ThrottlingException`

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
Associate Targets With Job

Service: AWS IoT

 Associates a group with a continuous job. The following criteria must be met:

- The job must have been created with the `targetSelection` field set to "CONTINUOUS".
- The job status must currently be "IN_PROGRESS".
- The total number of targets associated with a job must not exceed 100.

Request Syntax

```
POST /jobs/jobId/targets HTTP/1.1
Content-type: application/json

{
  "comment": "string",
  "targets": [ "string" ]
}
```

URI Request Parameters

The request requires the following URI parameters.

`jobId (p. 12)`

The unique identifier you assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9_\-]+`

Request Body

The request accepts the following data in JSON format.

`comment (p. 12)`

An optional comment string describing why the job was associated with the targets.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]+`

Required: No

`targets (p. 12)`

A list of thing group ARNs that define the targets of the job.

Type: Array of strings

Array Members: Minimum number of 1 item.

Required: Yes
Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "description": "string",
    "jobArn": "string",
    "jobId": "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.

description (p. 13)
   A short text description of the job.
   Type: String
   Length Constraints: Maximum length of 2028.
   Pattern: \[^\p{C}\]+

jobArn (p. 13)
   An ARN identifying the job.
   Type: String

jobId (p. 13)
   The unique identifier you assigned to this job when it was created.
   Type: String
   Length Constraints: Minimum length of 1. Maximum length of 64.
   Pattern: [a-zA-Z0-9_\-]+

Errors

InvalidRequestException
   The request is not valid.
   HTTP Status Code: 400

LimitExceededException
   The number of attached entities exceeds the limit.
   HTTP Status Code: 410

ResourceNotFoundException
   The specified resource does not exist.
   HTTP Status Code: 404
ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
AttachPolicy
Service: AWS IoT
Attaches a policy to the specified target.

Request Syntax

PUT /target-policies/policyName HTTP/1.1
Content-type: application/json

{
  "target": "string"
}

URI Request Parameters

The request requires the following URI parameters.

policyName (p. 15)
The name of the policy to attach.
Pattern: [\w+=,.@-]+

Request Body

The request accepts the following data in JSON format.

target (p. 15)
The identity to which the policy is attached.
Type: String
Required: Yes

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500
InvalidRequestException
The request is not valid.
HTTP Status Code: 400

LimitExceededException
The number of attached entities exceeds the limit.
HTTP Status Code: 410

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
AttachPrincipalPolicy
Service: AWS IoT

Attaches the specified policy to the specified principal (certificate or other credential).

Note: This API is deprecated. Please use AttachPolicy (p. 15) instead.

Request Syntax

PUT /principal-policies/\policyName HTTP/1.1
x-amzn-iot-principal: \principal

URI Request Parameters

The request requires the following URI parameters.

\policyName (p. 17)

The policy name.


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

\principal (p. 17)

The principal, which can be a certificate ARN (as returned from the CreateCertificate operation) or an Amazon Cognito ID.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

\InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500
\InvalidRequestException

The request is not valid.

HTTP Status Code: 400
LimitExceeded Exception

The number of attached entities exceeds the limit.

HTTP Status Code: 410

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailable Exception

The service is temporarily unavailable.

HTTP Status Code: 503

Throttling Exception

The rate exceeds the limit.

HTTP Status Code: 429

Unauthorized Exception

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
AttachThingPrincipal

Service: AWS IoT

Attaches the specified principal to the specified thing.

Request Syntax

```
PUT /things/thingName/principals HTTP/1.1
x-amzn-principal: principal
```

URI Request Parameters

The request requires the following URI parameters.

**principal (p. 19)**

The principal, such as a certificate or other credential.

**thingName (p. 19)**

The name of the thing.


Pattern: `[a-zA-Z0-9_:\-]+`

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404
ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CancelCertificateTransfer

Service: AWS IoT

Cancels a pending transfer for the specified certificate.

**Note** Only the transfer source account can use this operation to cancel a transfer. (Transfer destinations can use RejectCertificateTransfer (p. 258) instead.) After transfer, AWS IoT returns the certificate to the source account in the INACTIVE state. After the destination account has accepted the transfer, the transfer cannot be cancelled.

After a certificate transfer is cancelled, the status of the certificate changes from PENDING_TRANSFER to INACTIVE.

**Request Syntax**

```
PATCH /cancel-certificate-transfer/certificateId HTTP/1.1
```

**URI Request Parameters**

The request requires the following URI parameters.

**certificateId** (p. 21)

- The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

  - Length Constraints: Fixed length of 64.
  - Pattern: `(0x)?[a-fA-F0-9]+`

**Request Body**

The request does not have a request body.

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

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

**Errors**

- **InternalFailureException**
  - An unexpected error has occurred.
  - HTTP Status Code: 500

- **InvalidRequestException**
  - The request is not valid.
  - HTTP Status Code: 400
ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

TransferAlreadyCompletedException

You can't revert the certificate transfer because the transfer is already complete.

HTTP Status Code: 410

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CancelJob
Service: AWS IoT
Cancels a job.

Request Syntax

```
PUT /jobs/{jobId}/cancel HTTP/1.1
Content-type: application/json

{
    "comment": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**jobId (p. 23)**

The unique identifier you assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-_]+

Request Body

The request accepts the following data in JSON format.

**comment (p. 23)**

An optional comment string describing why the job was canceled.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

Required: No

Response Syntax

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

{
    "description": "string",
    "jobArn": "string",
    "jobId": "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.

**description (p. 23)**

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

**jobArn (p. 23)**

The job ARN.

Type: String

**jobId (p. 23)**

The unique identifier you assigned to this job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-_]+

**Errors**

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
ClearDefaultAuthorizer
Service: AWS IoT
Clears the default authorizer.

Request Syntax
DELETE /default-authorizer HTTP/1.1

URI Request Parameters
The request does not use any URI parameters.

Request Body
The request does not have a request body.

Response Syntax
HTTP/1.1 200

Response Elements
If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors
InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429
UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateAuthorizer
Service: AWS IoT
Creates an authorizer.

Request Syntax

```
POST /authorizer/authorizerName HTTP/1.1
Content-type: application/json

{
    "authorizerFunctionArn": "string",
    "status": "string",
    "tokenKeyName": "string",
    "tokenSigningPublicKeys": {
        "string": "string"
    }
}
```

URI Request Parameters
The request requires the following URI parameters.

authorizerName (p. 28)
The authorizer name.


Pattern: [\w=,@-]+

Request Body
The request accepts the following data in JSON format.

authorizerFunctionArn (p. 28)
The ARN of the authorizer's Lambda function.

Type: String

Required: Yes

status (p. 28)
The status of the create authorizer request.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

tokenKeyName (p. 28)
The name of the token key used to extract the token from the HTTP headers.

Type: String
Pattern: [a-zA-Z0-9_-]+
Required: Yes

tokenSigningPublicKeys (p. 28)
The public keys used to verify the digital signature returned by your custom authentication service.
Type: String to string map
Key Length Constraints: Minimum length of 1. Maximum length of 128.
Key Pattern: [a-zA-Z0-9_:\-]+
Value Length Constraints: Maximum length of 5120.
Required: Yes

Response Syntax

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

{"authorizerArn": "string",
 "authorizerName": "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.

authorizerArn (p. 29)
The authorizer ARN.
Type: String

authorizerName (p. 29)
The authorizer's name.
Type: String
Pattern: \[\w=,:@-]+\n
Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500
InvalidRequestException

The request is not valid.

HTTP Status Code: 400

LimitExceededException

The number of attached entities exceeds the limit.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateCertificateFromCsr

Service: AWS IoT

Creates an X.509 certificate using the specified certificate signing request.

**Note:** The CSR must include a public key that is either an RSA key with a length of at least 2048 bits or an ECC key from NIST P-256 or NIST P-384 curves.

**Note:** Reusing the same certificate signing request (CSR) results in a distinct certificate.

You can create multiple certificates in a batch by creating a directory, copying multiple .csr files into that directory, and then specifying that directory on the command line. The following commands show how to create a batch of certificates given a batch of CSRs.

Assuming a set of CSRs are located inside of the directory my-csr-directory:

On Linux and OS X, the command is:

```
$ ls my-csr-directory/ | xargs -I {} aws iot create-certificate-from-csr --certificate-signing-request file://my-csr-directory/{}
```

This command lists all of the CSRs in my-csr-directory and pipes each CSR file name to the aws iot create-certificate-from-csr AWS CLI command to create a certificate for the corresponding CSR.

The aws iot create-certificate-from-csr part of the command can also be run in parallel to speed up the certificate creation process:

```
$ ls my-csr-directory/ | xargs -P 10 -I {} aws iot create-certificate-from-csr --certificate-signing-request file://my-csr-directory/{}
```

On Windows PowerShell, the command to create certificates for all CSRs in my-csr-directory is:

```
> ls -Name my-csr-directory | %{aws iot create-certificate-from-csr --certificate-signing-request file://my-csr-directory/$_}
```

On a Windows command prompt, the command to create certificates for all CSRs in my-csr-directory is:

```
> forfiles /p my-csr-directory /c "cmd /c aws iot create-certificate-from-csr --certificate-signing-request file://@path"
```

**Request Syntax**

```plaintext
POST /certificates?setAsActive=string HTTP/1.1
Content-type: application/json

{"certificateSigningRequest": "string"}
```

**URI Request Parameters**

The request requires the following URI parameters.

**setAsActive** *(p. 31)*

Specifies whether the certificate is active.
**Request Body**

The request accepts the following data in JSON format.

**certificateSigningRequest (p. 31)**

The certificate signing request (CSR).

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**Response Syntax**

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

{
  "certificateArn": "string",
  "certificateId": "string",
  "certificatePem": "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.

**certificateArn (p. 32)**

The Amazon Resource Name (ARN) of the certificate. You can use the ARN as a principal for policy operations.

Type: String

**certificateId (p. 32)**

The ID of the certificate. Certificate management operations only take a certificateId.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

**certificatePem (p. 32)**

The certificate data, in PEM format.

Type: String


**Errors**

**InternalFailureException**

An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateJob
Service: AWS IoT

Creates a job.

Request Syntax

```
PUT /jobs/{jobId} HTTP/1.1
Content-type: application/json

{
    "description": "string",
    "document": "string",
    "documentParameters": {
        "string": "string"
    },
    "documentSource": "string",
    "jobExecutionsRolloutConfig": {
        "maximumPerMinute": number
    },
    "presignedUrlConfig": {
        "expiresInSec": number,
        "roleArn": "string"
    },
    "targets": [ "string" ],
    "targetSelection": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**jobId (p. 34)**
A job identifier which must be unique for your AWS account. We recommend using a UUID. Alphanumeric characters, "-" and "_" are valid for use here.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9-_.]+`

Request Body

The request accepts the following data in JSON format.

**description (p. 34)**
A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]`+

Required: No

**document (p. 34)**
The job document.
Type: String

Length Constraints: Maximum length of 32768.

Required: No

documentParameters (p. 34)

Parameters for the job document.

Type: String to string map

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

Key Pattern: [ a-zA-Z0-9:_-]+


Value Pattern: [ ^\p{C} ]+

Required: No

documentSource (p. 34)

An S3 link to the job document.

Type: String


Required: No

jobExecutionsRolloutConfig (p. 34)

Allows you to create a staged rollout of the job.

Type: JobExecutionsRolloutConfig (p. 390) object

Required: No

presignedUrlConfig (p. 34)

Configuration information for pre-signed S3 URLs.

Type: PresignedUrlConfig (p. 415) object

Required: No

targets (p. 34)

A list of things and thing groups to which the job should be sent.

Type: Array of strings

Array Members: Minimum number of 1 item.

Required: Yes

targetSelection (p. 34)

Specifies whether the job will continue to run (CONTINUOUS), or will be complete after all those things specified as targets have completed the job (SNAPSHOT). If continuous, the job may also be run on a thing when a change is detected in a target. For example, a job will run on a thing when the thing is added to a target group, even after the job was completed by all things originally in the group.
Type: String

Valid Values: CONTINUOUS | SNAPSHOT

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json
{
  "description": "string",
  "jobArn": "string",
  "jobId": "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.

description (p. 36)

The job description.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

jobArn (p. 36)

The job ARN.

Type: String

jobId (p. 36)

The unique identifier you assigned to this job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-_]+

Errors

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

LimitExceededException

The number of attached entities exceeds the limit.
HTTP Status Code: 410
**ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409
**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404
**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateKeysAndCertificate

Service: AWS IoT

Creates a 2048-bit RSA key pair and issues an X.509 certificate using the issued public key.

**Note** This is the only time AWS IoT issues the private key for this certificate, so it is important to keep it in a secure location.

**Request Syntax**

```
POST /keys-and-certificate?setAsActive=setParameter HTTP/1.1
```

**URI Request Parameters**

The request requires the following URI parameters.

- **setAsActive (p. 38)**
  
  Specifies whether the certificate is active.

**Request Body**

The request does not have a request body.

**Response Syntax**

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

{
   "certificateArn": "string",
   "certificateId": "string",
   "certificatePem": "string",
   "keyPair": {
      "PrivateKey": "string",
      "PublicKey": "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.

- **certificateArn (p. 38)**
  
  The ARN of the certificate.
  
  Type: String

- **certificateId (p. 38)**
  
  The ID of the certificate. AWS IoT issues a default subject name for the certificate (for example, AWS IoT Certificate).
  
  Type: String
Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+  

**certificatePem (p. 38)**  
The certificate data, in PEM format.

Type: String  


**keyPair (p. 38)**  
The generated key pair.

Type: **KeyPair (p. 400)** object

**Errors**

**InternalFailureException**  
An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**  
The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**  
The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**  
The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**  
You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateOTAUpdate

Service: AWS IoT

Creates an AWS IoT OTAUpdate on a target group of things or groups.

Request Syntax

```json
POST /otaUpdates/otaUpdateId HTTP/1.1
Content-type: application/json

{
    "additionalParameters": {
        "string" : "string"
    },
    "description": "string",
    "files": [
        {
            "attributes": {
                "string" : "string"
            },
            "codeSigning": {
                "awsSignerJobId": "string",
                "customCodeSigning": {
                    "certificateChain": {
                        "certificateName": "string",
                        "inlineDocument": "string",
                        "stream": {
                            "fileId": number,
                            "streamId": "string"
                        }
                    },
                    "hashAlgorithm": "string",
                    "signature": {
                        "inlineDocument": blob,
                        "stream": {
                            "fileId": number,
                            "streamId": "string"
                        }
                    }
                }
            },
            "hashAlgorithm": "string",
            "signature": {
                "inlineDocument": blob,
                "stream": {
                    "fileId": number,
                    "streamId": "string"
                }
            },
            "signatureAlgorithm": "string"
        }
    ],
    "filesSource": {
        "fileId": number,
        "streamId": "string"
    }
},
"fileName": "string",
"fileSource": {
    "fileId": number,
    "streamId": "string"
}
"fileVersion": "string"
"roleArn": "string",
"targets": [ "string" ],
"targetSelection": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**otaUpdateId (p. 41)**

The ID of the OTA update to be created.

Pattern: [a-zA-Z0-9_\-\_]+

**Request Body**

The request accepts the following data in JSON format.

**additionalParameters (p. 41)**

A list of additional OTA update parameters which are name-value pairs.

Type: String to string map

Required: No

**description (p. 41)**

The description of the OTA update.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: ^\p{C}]+$

Required: No

**files (p. 41)**

The files to be streamed by the OTA update.

Type: Array of OTAUpdateFile (p. 406) objects

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: Yes

**roleArn (p. 41)**

The IAM role that allows access to the AWS IoT Jobs service.

Type: String


Required: Yes

**targets (p. 41)**

The targeted devices to receive OTA updates.

Type: Array of strings

Array Members: Minimum number of 1 item.

Required: Yes

**targetSelection (p. 41)**

Specifies whether the update will continue to run (CONTINUOUS), or will be complete after all the things specified as targets have completed the update (SNAPSHOT). If continuous, the update may also be run on a thing when a change is detected in a target. For example, an update will run on a
thing when the thing is added to a target group, even after the update was completed by all things
originally in the group. Valid values: CONTINUOUS | SNAPSHOT.

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "awsIotJobArn": "string",
  "awsIotJobId": "string",
  "otaUpdateArn": "string",
  "otaUpdateId": "string",
  "otaUpdateStatus": "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.

awsIotJobArn (p. 43)

The AWS IoT job ARN associated with the OTA update.

Type: String

awsIotJobId (p. 43)

The AWS IoT job ID associated with the OTA update.

Type: String

otaUpdateArn (p. 43)

The OTA update ARN.

Type: String

otaUpdateId (p. 43)

The OTA update ID.

Type: String


Pattern: [\w-]{1,128}

otaUpdateStatus (p. 43)

The OTA update status.

Type: String
Valid Values: CREATE_PENDING | CREATE_IN_PROGRESS | CREATE_COMPLETE | CREATE_FAILED

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ResourceAlreadyExistsException
The resource already exists.
HTTP Status Code: 409

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreatePolicy
Service: AWS IoT
Creates an AWS IoT policy.
The created policy is the default version for the policy. This operation creates a policy version with a version identifier of 1 and sets 1 as the policy's default version.

Request Syntax

```plaintext
POST /policies/policyName HTTP/1.1
Content-type: application/json
{
    "policyDocument": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

policyName (p. 46)
The policy name.
Pattern: [\w+=,.@-]+

Request Body

The request accepts the following data in JSON format.

policyDocument (p. 46)
The JSON document that describes the policy. policyDocument must have a minimum length of 1, with a maximum length of 2048, excluding whitespace.

Type: String
Required: Yes

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
{
    "policyArn": "string",
    "policyDocument": "string",
    "policyName": "string",
    "policyVersionId": "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.

**policyArn (p. 46)**

The policy ARN.
Type: String

**policyDocument (p. 46)**

The JSON document that describes the policy.
Type: String

**policyName (p. 46)**

The policy name.
Type: String
Pattern: \[\w+=,.@-]+

**policyVersionId (p. 46)**

The policy version ID.
Type: String
Pattern: [0-9]+

Errors

**InternalFailureException**

An unexpected error has occurred.
HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.
HTTP Status Code: 400

**MalformedPolicyException**

The policy documentation is not valid.
HTTP Status Code: 400

**ResourceAlreadyExistsException**

The resource already exists.
HTTP Status Code: 409

**ServiceUnavailableException**

The service is temporarily unavailable.
HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.
HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreatePolicyVersion
Service: AWS IoT

Creates a new version of the specified AWS IoT policy. To update a policy, create a new policy version. A managed policy can have up to five versions. If the policy has five versions, you must use DeletePolicyVersion (p. 83) to delete an existing version before you create a new one.

Optionally, you can set the new version as the policy's default version. The default version is the operative version (that is, the version that is in effect for the certificates to which the policy is attached).

Request Syntax

```
POST /policies/policyName/version?setAsDefault=setAsDefault HTTP/1.1
Content-type: application/json

{
  "policyDocument": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**policyName (p. 49)**

The policy name.


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

**setAsDefault (p. 49)**

Specifies whether the policy version is set as the default. When this parameter is true, the new policy version becomes the operative version (that is, the version that is in effect for the certificates to which the policy is attached).

Request Body

The request accepts the following data in JSON format.

**policyDocument (p. 49)**

The JSON document that describes the policy. Minimum length of 1. Maximum length of 2048, excluding whitespace.

Type: String

Required: Yes

Response Syntax

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

{
```
"isDefaultVersion": boolean,
"policyArn": "string",
"policyDocument": "string",
"policyVersionId": "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.

isDefaultVersion (p. 49)

  Specifies whether the policy version is the default.
  Type: Boolean

policyArn (p. 49)

  The policy ARN.
  Type: String

policyDocument (p. 49)

  The JSON document that describes the policy.
  Type: String

policyVersionId (p. 49)

  The policy version ID.
  Type: String
  Pattern: [0-9]+

Errors

InternalFailureException

  An unexpected error has occurred.
  HTTP Status Code: 500

InvalidRequestException

  The request is not valid.
  HTTP Status Code: 400

MalformedPolicyException

  The policy documentation is not valid.
  HTTP Status Code: 400

ResourceNotFoundException

  The specified resource does not exist.
  HTTP Status Code: 404
ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

VersionsLimitExceeded Exception

The number of policy versions exceeds the limit.

HTTP Status Code: 409

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateRoleAlias
Service: AWS IoT

Creates a role alias.

Request Syntax

```plaintext
POST /role-aliases/roleAlias HTTP/1.1
Content-type: application/json

{
  "credentialDurationSeconds": number,
  "roleArn": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**roleAlias (p. 52)**

The role alias that points to a role ARN. This allows you to change the role without having to update the device.

Pattern: [\w=,@-]+

Request Body

The request accepts the following data in JSON format.

**credentialDurationSeconds (p. 52)**

How long (in seconds) the credentials will be valid.

Type: Integer


Required: No

**roleArn (p. 52)**

The role ARN.

Type: String


Required: Yes

Response Syntax

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

**roleAlias (p. 52)**

The role alias.

Type: String


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

**roleAliasArn (p. 52)**

The role alias ARN.

Type: String

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**LimitExceededException**

The number of attached entities exceeds the limit.

HTTP Status Code: 410

**ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.
HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## 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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateStream
Service: AWS IoT

Creates a stream for delivering one or more large files in chunks over MQTT. A stream transports data bytes in chunks or blocks packaged as MQTT messages from a source like S3. You can have one or more files associated with a stream. The total size of a file associated with the stream cannot exceed more than 2 MB. The stream will be created with version 0. If a stream is created with the same streamID as a stream that existed and was deleted within last 90 days, we will resurrect that old stream by incrementing the version by 1.

Request Syntax

```plaintext
POST /streams/{streamId} HTTP/1.1
Content-type: application/json

{
  "description": "string",
  "files": [
    {
      "fileId": number,
      "s3Location": {
        "bucket": "string",
        "key": "string",
        "version": "string"
      }
    }
  ],
  "roleArn": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**streamId (p. 55)**

The stream ID.


Pattern: [a-zA-Z0-9_.-]+

Request Body

The request accepts the following data in JSON format.

**description (p. 55)**

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+
files (p. 55)

The files to stream.
Type: Array of StreamFile (p. 427) objects
Array Members: Minimum number of 1 item. Maximum number of 10 items.
Required: Yes

roleArn (p. 55)

An IAM role that allows the IoT service principal assumes to access your S3 files.
Type: String
Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

```json
{
  "description": "string",
  "streamArn": "string",
  "streamId": "string",
  "streamVersion": number
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.
The following data is returned in JSON format by the service.

description (p. 56)

A description of the stream.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: [^\p{C}]+

streamArn (p. 56)

The stream ARN.
Type: String

streamId (p. 56)

The stream ID.
Type: String
Pattern: \[a-zA-Z0-9-\_\-]++

**streamVersion (p. 56)**

The version of the stream.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 65535.

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
AWS IoT API Reference
CreateStream

- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateThing
Service: AWS IoT

Creates a thing record in the registry.

Request Syntax

POST /things/thingName HTTP/1.1
Content-type: application/json

{
  "attributePayload": {
    "attributes": {
      "string": "string"
    },
    "merge": boolean
  },
  "thingTypeName": "string"
}

URI Request Parameters

The request requires the following URI parameters.

thingName (p. 59)
The name of the thing to create.
Pattern: [a-zA-Z0-9:-]+

Request Body

The request accepts the following data in JSON format.

attributePayload (p. 59)
The attribute payload, which consists of up to three name/value pairs in a JSON document. For example:
{"attributes":{"string1":"string2"}}
Type: AttributePayload (p. 353) object
Required: No

thingTypeName (p. 59)
The name of the thing type associated with the new thing.
Type: String
Pattern: [a-zA-Z0-9:-]+
Required: No
Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "thingArn": "string",
  "thingId": "string",
  "thingName": "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.

thingArn (p. 60)

  The ARN of the new thing.

  Type: String

thingId (p. 60)

  The thing ID.

  Type: String

thingName (p. 60)

  The name of the new thing.

  Type: String


  Pattern: [a-zA-Z0-9:_-]+

Errors

InternalFailureException

  An unexpected error has occurred.

  HTTP Status Code: 500

InvalidRequestException

  The request is not valid.

  HTTP Status Code: 400

ResourceAlreadyExistsException

  The resource already exists.

  HTTP Status Code: 409

ResourceNotFoundException

  The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateThingGroup
Service: AWS IoT
Create a thing group.

Request Syntax
POST /thing-groups/thingGroupName HTTP/1.1
Content-type: application/json

{
  "parentGroupName": "string",
  "thingGroupProperties": {
    "attributePayload": {
      "attributes": {
        "string": "string"
      },
      "merge": boolean
    },
    "thingGroupDescription": "string"
  }
}

URI Request Parameters
The request requires the following URI parameters.

thingGroupName (p. 62)
The thing group name to create.
Pattern: [a-zA-Z0-9-:_\-]+

Request Body
The request accepts the following data in JSON format.

parentGroupName (p. 62)
The name of the parent thing group.
Type: String
Pattern: [a-zA-Z0-9-:_\-]+
Required: No

thingGroupProperties (p. 62)
The thing group properties.
Type: ThingGroupProperties (p. 436) object
Required: No
Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "thingGroupArn": "string",
   "thingGroupId": "string",
   "thingGroupName": "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.

thingGroupArn (p. 63)

   The thing group ARN.
   Type: String

thingGroupId (p. 63)

   The thing group ID.
   Type: String
   Pattern: [a-zA-Z0-9\-]+

thingGroupName (p. 63)

   The thing group name.
   Type: String
   Pattern: [a-zA-Z0-9:.-]+

Errors

InternalFailureException

   An unexpected error has occurred.
   HTTP Status Code: 500

InvalidRequestException

   The request is not valid.
   HTTP Status Code: 400

ResourceAlreadyExistsException

   The resource already exists.
   HTTP Status Code: 409
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateThingType
Service: AWS IoT
Creates a new thing type.

Request Syntax

```
POST /thing-types/thingTypeName HTTP/1.1
Content-type: application/json

{
   "thingTypeProperties": {
      "searchableAttributes": [ "string" ],
      "thingTypeDescription": "string"
   }
}
```

URI Request Parameters

The request requires the following URI parameters.

**thingTypeName** (p. 65)
The name of the thing type.
Pattern: [a-zA-Z0-9:_-]+

Request Body

The request accepts the following data in JSON format.

**thingTypeProperties** (p. 65)
The ThingTypeProperties for the thing type to create. It contains information about the new thing type including a description, and a list of searchable thing attribute names.
Type: ThingTypeProperties (p. 440) object
Required: No

Response Syntax

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

{
   "thingTypeArn": "string",
   "thingTypeId": "string",
   "thingTypeName": "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.

**thingTypeArn (p. 65)**

The Amazon Resource Name (ARN) of the thing type.

Type: String

**thingTypeId (p. 65)**

The thing type ID.

Type: String

**thingTypeName (p. 65)**

The name of the thing type.

Type: String


Pattern: [a-zA-Z0-9:_-]+

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
CreateTopicRule
Service: AWS IoT

Creates a rule. Creating rules is an administrator-level action. Any user who has permission to create rules will be able to access data processed by the rule.

Request Syntax

```
POST /rules/ruleName HTTP/1.1
Content-type: application/json

{
    "topicRulePayload": {
        "actions": [
            {
                "cloudwatchAlarm": {
                    "alarmName": "string",
                    "roleArn": "string",
                    "stateReason": "string",
                    "stateValue": "string"
                },
                "cloudwatchMetric": {
                    "metricName": "string",
                    "metricNamespace": "string",
                    "metricTimestamp": "string",
                    "metricUnit": "string",
                    "metricValue": "string",
                    "roleArn": "string"
                },
                "dynamodb": {
                    "hashKeyField": "string",
                    "hashKeyType": "string",
                    "hashKeyValue": "string",
                    "operation": "string",
                    "payloadField": "string",
                    "rangeKeyField": "string",
                    "rangeKeyType": "string",
                    "rangeKeyValue": "string",
                    "roleArn": "string",
                    "tableName": "string"
                },
                "dynamodbv2": {
                    "putItem": {
                        "tableName": "string"
                    },
                    "roleArn": "string"
                },
                "elasticsearch": {
                    "endpoint": "string",
                    "id": "string",
                    "index": "string",
                    "roleArn": "string",
                    "type": "string"
                },
                "firehose": {
                    "deliveryStreamName": "string",
                    "roleArn": "string",
                    "separator": "string"
                },
                "iotAnalytics": {
                    "channelArn": "string",
                    "channelName": "string",
                    "roleArn": "string"
                }
            }
        ]
    }
}
```

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"kinesis": {
    "partitionKey": "string",
    "roleArn": "string",
    "streamName": "string"
},
"lambda": {
    "functionArn": "string"
},
"republish": {
    "roleArn": "string",
    "topic": "string"
},
"s3": {
    "bucketName": "string",
    "cannedAcl": "string",
    "key": "string",
    "roleArn": "string"
},
"salesforce": {
    "token": "string",
    "url": "string"
},
"sns": {
    "messageFormat": "string",
    "roleArn": "string",
    "targetArn": "string"
},
"sqs": {
    "queueUrl": "string",
    "roleArn": "string",
    "useBase64": boolean
},
"awsIotSqlVersion": "string",
"description": "string",
"errorAction": {
    "cloudwatchAlarm": {
        "alarmName": "string",
        "roleArn": "string",
        "stateReason": "string",
        "stateValue": "string"
    },
    "cloudwatchMetric": {
        "metricName": "string",
        "metricNamespace": "string",
        "metricTimestamp": "string",
        "metricUnit": "string",
        "metricValue": "string",
        "roleArn": "string"
    },
    "dynamoDB": {
        "hashKeyField": "string",
        "hashKeyType": "string",
        "hashKeyValue": "string",
        "operation": "string",
        "payloadField": "string",
        "rangeKeyField": "string",
        "rangeKeyType": "string",
        "rangeKeyValue": "string",
        "roleArn": "string",
        "tableName": "string"
    },
    "dynamoDBv2": {
        "putItem": {
            "key": {
                "hashKey": "string",
                "rangeKey": "string"
            },
            "attributeValues": {
                "string": {
                    "value": "string"
                }
            },
            "returnValues": "string",
            "returnConsumedCapacity": "string",
            "streamViewType": "string"
        }
    }
}
"tableName": "string",
"roleArn": "string",
"elasticsearch": {
  "endpoint": "string",
  "id": "string",
  "index": "string",
  "roleArn": "string",
  "type": "string"
},
"firehose": {
  "deliveryStreamName": "string",
  "roleArn": "string",
  "separator": "string"
},
"iotAnalytics": {
  "channelArn": "string",
  "channelName": "string",
  "roleArn": "string"
},
"kinesis": {
  "partitionKey": "string",
  "roleArn": "string",
  "streamName": "string"
},
"lambda": {
  "functionArn": "string"
},
"republish": {
  "roleArn": "string",
  "topic": "string"
},
"s3": {
  "bucketName": "string",
  "cannedAcl": "string",
  "key": "string",
  "roleArn": "string"
},
"salesforce": {
  "token": "string",
  "url": "string"
},
"sns": {
  "messageFormat": "string",
  "roleArn": "string",
  "targetArn": "string"
},
"sqs": {
  "queueUrl": "string",
  "roleArn": "string",
  "useBase64": boolean
},
"ruleDisabled": boolean,
"sql": "string"}
ruleName (p. 68)

The name of the rule.


Pattern: ^[a-zA-Z0-9_]+$

Request Body

The request accepts the following data in JSON format.

topicRulePayload (p. 68)

The rule payload.

Type: TopicRulePayload (p. 444) object

Required: Yes

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

SqlParseException

The Rule-SQL expression can't be parsed correctly.

HTTP Status Code: 400
See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteAuthorizer
Service: AWS IoT
Deletes an authorizer.

Request Syntax

DELETE /authorizer/authorizerName HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.

authorizerName (p. 73)
The name of the authorizer to delete.
Pattern: [\w=,@-]+

Request Body
The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements
If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

DeleteConflictException
You can't delete the resource because it is attached to one or more resources.
HTTP Status Code: 409

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteCACertificate
Service: AWS IoT
Deletes a registered CA certificate.

Request Syntax
```
DELETE /cacertificate/caCertificateId HTTP/1.1
```

URI Request Parameters
The request requires the following URI parameters.

**certificateId (p. 75)**
The ID of the certificate to delete. (The last part of the certificate ARN contains the certificate ID.)
Length Constraints: Fixed length of 64.
Pattern: (0x)?[a-fA-F0-9]+

Request Body
The request does not have a request body.

Response Syntax
```
HTTP/1.1 200
```

Response Elements
If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

**CertificateStateException**
The certificate operation is not allowed.
HTTP Status Code: 406

**InternalFailureException**
An unexpected error has occurred.
HTTP Status Code: 500

**InvalidRequestException**
The request is not valid.
HTTP Status Code: 400

**ResourceNotFoundException**
The specified resource does not exist.
HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteCertificate
Service: AWS IoT

Deletes the specified certificate.

A certificate cannot be deleted if it has a policy attached to it or if its status is set to ACTIVE. To delete a certificate, first use the DetachPrincipalPolicy (p. 141) API to detach all policies. Next, use the UpdateCertificate (p. 302) API to set the certificate to the INACTIVE status.

Request Syntax

DELETE /certificates/certificateId?forceDelete=forceDelete HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

certificateId (p. 77)
The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)
Length Constraints: Fixed length of 64.
Pattern: (0x)?[a-fA-F0-9]+

forceDelete (p. 77)
Forces a certificate request to be deleted.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

CertificateStateException
The certificate operation is not allowed.
HTTP Status Code: 406

DeleteConflictException
You can't delete the resource because it is attached to one or more resources.
HTTP Status Code: 409
InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteOTAUpdate
Service: AWS IoT
Delete an OTA update.

Request Syntax

```
DELETE /otaUpdates/otaUpdateId HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

`otaUpdateId (p. 79)`

The OTA update ID to delete.


Pattern: `[a-zA-Z0-9_\-]+`

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

`InternalFailureException`

An unexpected error has occurred.

HTTP Status Code: 500

`InvalidRequestException`

The request is not valid.

HTTP Status Code: 400

`ResourceNotFoundException`

The specified resource does not exist.

HTTP Status Code: 404

`ServiceUnavailableException`

The service is temporarily unavailable.
HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeletePolicy

Service: AWS IoT

Deletes the specified policy.

A policy cannot be deleted if it has non-default versions or it is attached to any certificate.

To delete a policy, use the DeletePolicyVersion API to delete all non-default versions of the policy; use the DetachPrincipalPolicy API to detach the policy from any certificate; and then use the DeletePolicy API to delete the policy.

When a policy is deleted using DeletePolicy, its default version is deleted with it.

Request Syntax

DELETE /policies/{policyName} HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

policyName (p. 81)

The name of the policy to delete.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

DeleteConflictException

You can't delete the resource because it is attached to one or more resources.

HTTP Status Code: 409

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500
InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeletePolicyVersion

Service: AWS IoT

Deletes the specified version of the specified policy. You cannot delete the default version of a policy using this API. To delete the default version of a policy, use DeletePolicy (p. 81). To find out which version of a policy is marked as the default version, use ListPolicyVersions.

Request Syntax

DELETE /policies/policyName/version/policyVersionId HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

policyName (p. 83)

  The name of the policy.


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

policyVersionId (p. 83)

  The policy version ID.

  Pattern: [0-9]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

DeleteConflictException

  You can't delete the resource because it is attached to one or more resources.

  HTTP Status Code: 409

InternalFailureException

  An unexpected error has occurred.

  HTTP Status Code: 500
InvalidRequestException
  The request is not valid.
  HTTP Status Code: 400

ResourceNotFoundException
  The specified resource does not exist.
  HTTP Status Code: 404

ServiceUnavailableException
  The service is temporarily unavailable.
  HTTP Status Code: 503

ThrottlingException
  The rate exceeds the limit.
  HTTP Status Code: 429

UnauthorizedException
  You are not authorized to perform this operation.
  HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteRegistrationCode
Service: AWS IoT

Deletes a CA certificate registration code.

Request Syntax

DELETE /registrationcode HTTP/1.1

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteRoleAlias
Service: AWS IoT
Deletes a role alias

Request Syntax

```
DELETE /role-aliases/roleAlias HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**roleAlias (p. 87)**
- The role alias to delete.
  - Pattern: [\w=,@-]+

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

**DeleteConflictException**
- You can't delete the resource because it is attached to one or more resources.
  - HTTP Status Code: 409

**InternalFailureException**
- An unexpected error has occurred.
  - HTTP Status Code: 500

**InvalidRequestException**
- The request is not valid.
  - HTTP Status Code: 400

**ResourceNotFoundException**
- The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteStream
Service: AWS IoT
Deletes a stream.

Request Syntax

```
DELETE /streams/streamId HTTP/1.1
```

URI Request Parameters
The request requires the following URI parameters.

`streamId` (p. 89)
The stream ID.

- Pattern: `[a-zA-Z0-9_\-]+`

Request Body
The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements
If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

`DeleteConflictException`
You can't delete the resource because it is attached to one or more resources.

HTTP Status Code: 409

`InternalFailureException`
An unexpected error has occurred.

HTTP Status Code: 500

`InvalidRequestException`
The request is not valid.

HTTP Status Code: 400

`ResourceNotFoundException`
The specified resource does not exist.
HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteThing
Service: AWS IoT
Deletes the specified thing.

Request Syntax

```
DELETE /things/thingName?expectedVersion=expectedVersion HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

expectedVersion (p. 91)

The expected version of the thing record in the registry. If the version of the record in the registry
does not match the expected version specified in the request, the DeleteThing request is rejected
with a VersionConflictException.

tingName (p. 91)

The name of the thing to delete.


Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.
HTTP Status Code: 404
**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429
**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401
**VersionConflictException**

An exception thrown when the version of a thing passed to a command is different than the version specified with the --version parameter.

HTTP Status Code: 409

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteThingGroup

Service: AWS IoT

Deletes a thing group.

Request Syntax

DELETE /thing-groups/thingGroupName?expectedVersion=expectedVersion HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

expectedVersion (p. 93)

The expected version of the thing group to delete.

thingGroupName (p. 93)

The name of the thing group to delete.


Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429
VersionConflictException

An exception thrown when the version of a thing passed to a command is different than the version specified with the --version parameter.

HTTP Status Code: 409

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteThingType

Service: AWS IoT

Deletes the specified thing type. You cannot delete a thing type if it has things associated with it. To delete a thing type, first mark it as deprecated by calling DeprecateThingType (p. 101), then remove any associated things by calling UpdateThing (p. 314) to change the thing type on any associated thing, and finally use DeleteThingType (p. 95) to delete the thing type.

Request Syntax

```
DELETE /thing-types/thingTypeName HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**thingTypeName (p. 95)**

- The name of the thing type.
  - Pattern: `[a-zA-Z0-9:_-]+`

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

**InternalFailureException**

- An unexpected error has occurred.
  - HTTP Status Code: 500

**InvalidRequestException**

- The request is not valid.
  - HTTP Status Code: 400

**ResourceNotFoundException**

- The specified resource does not exist.
  - HTTP Status Code: 404
ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteTopicRule
Service: AWS IoT
Deletes the rule.

Request Syntax

DELETE /rules/ruleName HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

ruleName (p. 97)
   The name of the rule.
   Pattern: ^[a-zA-Z0-9_]++$

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalException
   An unexpected error has occurred.
   HTTP Status Code: 500
InvalidRequestException
   The request is not valid.
   HTTP Status Code: 400
ServiceUnavailableException
   The service is temporarily unavailable.
   HTTP Status Code: 503
UnauthorizedException
   You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteV2LoggingLevel

Service: AWS IoT

Deletes a logging level.

Request Syntax

DELETE /v2LoggingLevel?targetName=targetName&targetType=targetType HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

targetName (p. 99)

The name of the resource for which you are configuring logging.

targetType (p. 99)

The type of resource for which you are configuring logging. Must be THING_Group.

Valid Values: DEFAULT | THING_GROUP

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503
See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeprecateThingType
Service: AWS IoT

Deprecates a thing type. You can not associate new things with deprecated thing type.

Request Syntax

```text
POST /thing-types/\{thingTypeName\}/deprecate HTTP/1.1
Content-type: application/json

{  
  "undoDeprecate": boolean
}
```

URI Request Parameters

The request requires the following URI parameters.

**thingTypeName (p. 101)**
- The name of the thing type to deprecate.
- Pattern: `[a-zA-Z0-9_-]+`

Request Body

The request accepts the following data in JSON format.

**undoDeprecate (p. 101)**
- Whether to undeprecate a deprecated thing type. If true, the thing type will not be deprecated anymore and you can associate it with things.
- Type: Boolean
- Required: No

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

**InternalFailureException**
- An unexpected error has occurred.
- HTTP Status Code: 500
InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeAuthorizer

Service: AWS IoT

Describes an authorizer.

Request Syntax

GET /authorizer/authorizerName HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

**authorizerName (p. 103)**

The name of the authorizer to describe.


Pattern: [\w=,@-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

```
{
   "authorizerDescription": {
      "authorizerArn": "string",
      "authorizerFunctionArn": "string",
      "authorizerName": "string",
      "creationDate": number,
      "lastModifiedDate": number,
      "status": "string",
      "tokenKeyName": "string",
      "tokenSigningPublicKeys": {
         "string": "string"
      }
   }
}
```

Response Elements

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

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

**authorizerDescription (p. 103)**

The authorizer description.

Type: AuthorizerDescription (p. 355) object
Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeCACertificate
Service: AWS IoT

Describes a registered CA certificate.

Request Syntax
GET /cacertificate/caCertificateId HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.

certificateId (p. 105)
  The CA certificate identifier.
  Length Constraints: Fixed length of 64.
  Pattern: (0x)?[a-fA-F0-9]+

Request Body
The request does not have a request body.

Response Syntax
HTTP/1.1 200
Content-type: application/json

{
  "certificateDescription": {
    "autoRegistrationStatus": "string",
    "certificateArn": "string",
    "certificateId": "string",
    "certificatePem": "string",
    "creationDate": number,
    "ownedBy": "string",
    "status": "string"
  },
  "registrationConfig": {
    "roleArn": "string",
    "templateBody": "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.

certificateDescription (p. 105)
  The CA certificate description.
Type: CACertificateDescription (p. 360) object
registrationConfig (p. 105)
Information about the registration configuration.
Type: RegistrationConfig (p. 417) object

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeCertificate
Service: AWS IoT

Gets information about the specified certificate.

Request Syntax

GET /certificates/certificateId HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

certificateId (p. 107)

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+ 

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "certificateDescription": {
        "caCertificateId": "string",
        "certificateArn": "string",
        "certificateId": "string",
        "certificatePem": "string",
        "creationDate": number,
        "lastModifiedDate": number,
        "ownedBy": "string",
        "previousOwnedBy": "string",
        "status": "string",
        "transferData": {
            "acceptDate": number,
            "rejectDate": number,
            "rejectReason": "string",
            "transferDate": number,
            "transferMessage": "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.
certificateDescription (p. 107)

The description of the certificate.

Type: CertificateDescription (p. 363) object

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeDefaultAuthorizer
Service: AWS IoT

Describes the default authorizer.

Request Syntax

GET /default-authorizer HTTP/1.1

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "authorizerDescription": {  
    "authorizerArn": "string",  
    "authorizerFunctionArn": "string",  
    "authorizerName": "string",  
    "creationDate": number,  
    "lastModifedDate": number,  
    "status": "string",  
    "tokenKeyName": "string",  
    "tokenSigningPublicKeys": {  
      "string": "string"  
    }  
  }  
}

Response Elements

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

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

authorizerDescription (p. 109)

The default authorizer's description.

Type: AuthorizerDescription (p. 355) object

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500
InvalidRequestException
   The request is not valid.
   HTTP Status Code: 400

ResourceNotFoundException
   The specified resource does not exist.
   HTTP Status Code: 404

ServiceUnavailableException
   The service is temporarily unavailable.
   HTTP Status Code: 503

ThrottlingException
   The rate exceeds the limit.
   HTTP Status Code: 429

UnauthorizedException
   You are not authorized to perform this operation.
   HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeEndpoint
Service: AWS IoT

Returns a unique endpoint specific to the AWS account making the call.

Request Syntax

GET /endpoint?endpointType=endpointType HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

`endpointType (p. 111)`
The endpoint type.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  "endpointAddress": "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.

`endpointAddress (p. 111)`
The endpoint. The format of the endpoint is as follows: identifier.iot.region.amazonaws.com.

Type: String

Errors

`InternalFailureException`
An unexpected error has occurred.

HTTP Status Code: 500

`InvalidRequestException`
The request is not valid.

HTTP Status Code: 400
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeEventConfigurations
Service: AWS IoT
Describes event configurations.

Request Syntax

GET /event-configurations HTTP/1.1

URI Request Parameters
The request does not use any URI parameters.

Request Body
The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "creationDate": number,
   "eventConfigurations": {
      "string": {
         "Enabled": boolean
      }
   },
   "lastModifiedDate": number
}

Response Elements
If the action is successful, the service sends back an HTTP 200 response.
The following data is returned in JSON format by the service.

creationDate (p. 113)
The creation date of the event configuration.
Type: Timestamp
eventConfigurations (p. 113)
The event configurations.
Type: String to Configuration (p. 371) object map
Valid Keys: THING | THING_GROUP | THING_TYPE | THING_GROUP_MEMBERSHIP | THING_GROUP_HIERARCHY | THING_TYPE_ASSOCIATION | JOB | JOB_EXECUTION
lastModifiedDate (p. 113)
The date the event configurations were last modified.
Type: Timestamp
**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeIndex
Service: AWS IoT
Describes a search index.

Request Syntax

GET /indices/indexName HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

indexName (p. 115)
The index name.
Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json
{
  "indexName": "string",
  "indexStatus": "string",
  "schema": "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.

indexName (p. 115)
The index name.
Type: String
Pattern: [a-zA-Z0-9:_-]+

indexStatus (p. 115)
The index status.

115
Type: String

Valid Values: ACTIVE | BUILDING | REBUILDING

Contains a value that specifies the type of indexing performed. Valid values are:
1. REGISTRY – Your thing index will contain only registry data.
2. REGISTRY_AND_SHADOW - Your thing index will contain registry and shadow data.

Type: String

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
DescribeJob
Service: AWS IoT
Describes a job.
Request Syntax
GET /jobs/jobId HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.
jobId (p. 118)
The unique identifier you assigned to this job when it was created.
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [a-zA-Z0-9-_]+

Request Body
The request does not have a request body.
Response Syntax
HTTP/1.1 200
Content-type: application/json
{
  "documentSource": "string",
  "job": {
    "comment": "string",
    "completedAt": number,
    "createdAt": number,
    "description": "string",
    "documentParameters": {
      "string": "string"
    },
    "jobArn": "string",
    "jobExecutionsRolloutConfig": {
      "maximumPerMinute": number
    },
    "jobId": "string",
    "jobProcessDetails": {
      "numberOfCanceledThings": number,
      "numberOfFailedThings": number,
      "numberOfInProgressThings": number,
      "numberOfQueuedThings": number,
      "numberOfRejectedThings": number,
      "numberOfRemovedThings": number,
      "numberOfSucceededThings": number,
      "processingTargets": [ "string" ]
    },
    "lastUpdatedAt": number,
    "presignedUrlConfig": {
      "expiresInSec": number
    }
  }
}
"roleArn": "string",
},
"status": "string",
"targets": [ "string" ],
"targetSelection": "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.

documentSource (p. 118)

An S3 link to the job document.

Type: String


job (p. 118)

Information about the job.

Type: Job (p. 385) object

Errors

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

• AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
DescribeJobExecution

Service: AWS IoT

Describes a job execution.

Request Syntax

```
GET /things/thingName/jobs/jobId?executionNumber=executionNumber HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**executionNumber (p. 121)**

A string (consisting of the digits "0" through "9") which is used to specify a particular job execution on a particular device.

**jobId (p. 121)**

The unique identifier you assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-_]+

**thingName (p. 121)**

The name of the thing on which the job execution is running.


Pattern: [a-zA-Z0-9-_]+

Request Body

The request does not have a request body.

Response Syntax

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

{
   "execution": {
      "executionNumber": number,
      "jobId": "string",
      "lastUpdatedAt": number,
      "queuedAt": number,
      "startedAt": number,
      "status": "string",
      "statusDetails": {
         "detailsMap": {
            "string" : "string"
         },
         "string" : "string"
      },
      "thingArn": "string"
   }
```

121
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.

execution (p. 121)

Information about the job execution.

Type: JobExecution (p. 388) object

Errors

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeRoleAlias
Service: AWS IoT

Describes a role alias.

Request Syntax

GET /role-aliases/roleAlias HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

roleAlias (p. 123)

The role alias to describe.


Pattern: [\w=,@-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

```
{
  "roleAliasDescription": {
    "creationDate": number,
    "credentialDurationSeconds": number,
    "lastModifiedDate": number,
    "owner": "string",
    "roleAlias": "string",
    "roleArn": "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.

roleAliasDescription (p. 123)

The role alias description.

Type: RoleAliasDescription (p. 419) object
Errors

**InternalFailureException**
An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**
The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**
The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**
The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**
The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**
You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeStream

Service: AWS IoT

Gets information about a stream.

Request Syntax

```
GET /streams/streamId HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**streamId (p. 125)**

The stream ID.


Pattern: [a-zA-Z0-9-_]+

Request Body

The request does not have a request body.

Response Syntax

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

{
    "streamInfo": {
        "createdAt": number,
        "description": "string",
        "files": [
            {
                "fileId": number,
                "s3Location": {
                    "bucket": "string",
                    "key": "string",
                    "version": "string"
                }
            }
        ],
        "lastUpdatedAt": number,
        "roleArn": "string",
        "streamArn": "string",
        "streamId": "string",
        "streamVersion": number
    }
}
```

Response Elements

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

The following data is returned in JSON format by the service.
streamInfo (p. 125)

Information about the stream.

Type: StreamInfo (p. 428) object

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeThing

Service: AWS IoT

GET /things/thingName HTTP/1.1

The request requires the following URI parameters.

thingName (p. 127)

The name of the thing.


Pattern: [a-zA-Z0-9:_-]+

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "attributes": {
      "string": "string"
   },
   "defaultClientId": "string",
   "thingArn": "string",
   "thingId": "string",
   "thingName": "string",
   "thingTypeName": "string",
   "version": number
}

Response Elements

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

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

attributes (p. 127)

The thing attributes.

Type: String to string map

Key Length Constraints: Maximum length of 128.
DescribeThing

Key Pattern: [a-zA-Z0-9_.@/:#-]+
Value Length Constraints: Maximum length of 800.
Value Pattern: [a-zA-Z0-9_.@/:#-]*

**defaultClientId (p. 127)**
The default client ID.
Type: String

**thingArn (p. 127)**
The ARN of the thing to describe.
Type: String

**thingId (p. 127)**
The ID of the thing to describe.
Type: String

**thingName (p. 127)**
The name of the thing.
Type: String
Pattern: [a-zA-Z0-9:._+-]+

**thingTypeName (p. 127)**
The thing type name.
Type: String
Pattern: [a-zA-Z0-9:._+-]+

**version (p. 127)**
The current version of the thing record in the registry.

**Note**
To avoid unintentional changes to the information in the registry, you can pass the version information in the expectedVersion parameter of the UpdateThing and DeleteThing calls.
Type: Long

**Errors**

**InternalFailureException**
An unexpected error has occurred.
HTTP Status Code: 500

**InvalidRequestException**
The request is not valid.
HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeThingGroup
Service: AWS IoT

Describe a thing group.

Request Syntax

GET /thing-groups/thingGroupName HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

thingGroupName (p. 130)
The name of the thing group.


Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "thingGroupArn": "string",
  "thingGroupId": "string",
  "thingGroupMetadata": {
    "creationDate": number,
    "parentGroupName": "string",
    "rootToParentThingGroups": [  
      {  
        "groupArn": "string",
        "groupName": "string"
      }
    ],
  },
  "thingGroupName": "string",
  "thingGroupProperties": {
    "attributePayload": {
      "attributes": {
        "string": "string"
      },
      "merge": boolean
    },
    "thingGroupDescription": "string"
  },
  "version": number
}
Response Elements

If the action is successful, the service sends back an HTTP 200 response.
The following data is returned in JSON format by the service.

`thingGroupArn (p. 130)`

The thing group ARN.
Type: String

`thingGroupId (p. 130)`

The thing group ID.
Type: String
Pattern: `[a-zA-Z0-9-]+`

`thingGroupMetadata (p. 130)`

Thing group metadata.
Type: `ThingGroupMetadata (p. 435)` object

`thingGroupName (p. 130)`

The name of the thing group.
Type: String
Pattern: `[a-zA-Z0-9:.-]+`

`thingGroupProperties (p. 130)`

The thing group properties.
Type: `ThingGroupProperties (p. 436)` object

`version (p. 130)`

The version of the thing group.
Type: Long

Errors

**InternalFailureException**

An unexpected error has occurred.
HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.
HTTP Status Code: 400
ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeThingRegistrationTask

Service: AWS IoT

Describes a bulk thing provisioning task.

Request Syntax

GET /thing-registration-tasks/{taskId} HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

taskId (p. 133)

The task ID.

Length Constraints: Maximum length of 40.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "creationDate": number,
  "failureCount": number,
  "inputFileBucket": "string",
  "inputFileKey": "string",
  "lastModifiedDate": number,
  "message": "string",
  "percentageProgress": number,
  "roleArn": "string",
  "status": "string",
  "successCount": number,
  "taskId": "string",
  "templateBody": "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.

creationDate (p. 133)

The task creation date.

Type: Timestamp

failureCount (p. 133)

The number of things that failed to be provisioned.
inputFileBucket (p. 133)
The S3 bucket that contains the input file.
Type: String
Pattern: [a-zA-Z0-9.\-_]+

inputFileKey (p. 133)
The input file key.
Type: String
Pattern: [a-zA-Z0-9\._\-*'(\)-\/]+

lastModifiedDate (p. 133)
The date when the task was last modified.
Type: Timestamp

message (p. 133)
The message.
Type: String
Length Constraints: Maximum length of 2048.

percentageProgress (p. 133)
The progress of the bulk provisioning task expressed as a percentage.
Type: Integer
Valid Range: Minimum value of 0. Maximum value of 100.

roleArn (p. 133)
The role ARN that grants access to the input file bucket.
Type: String

status (p. 133)
The status of the bulk thing provisioning task.
Type: String
Valid Values: InProgress | Completed | Failed | Cancelled | Cancelling

successCount (p. 133)
The number of things successfully provisioned.
Type: Integer

taskId (p. 133)
The task ID.
Type: String
Length Constraints: Maximum length of 40.

**templateBody (p. 133)**

The task's template.

Type: String

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeThingType
Service: AWS IoT

Gets information about the specified thing type.

Request Syntax

GET /thing-types/thingTypeName HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

**thingTypeName (p. 136)**

The name of the thing type.


Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

```json
{
    "thingTypeArn": "string",
    "thingTypeId": "string",
    "thingTypeMetadata": {
        "creationDate": number,
        "deprecated": boolean,
        "deprecationDate": number
    },
    "thingTypeName": "string",
    "thingTypeProperties": {
        "searchableAttributes": [ "string" ],
        "thingTypeDescription": "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.

**thingTypeArn (p. 136)**

The thing type ARN.

Type: String
thingTypeId (p. 136)

The thing type ID.

Type: String

thingTypeMetadata (p. 136)

The ThingTypeMetadata contains additional information about the thing type including: creation date and time, a value indicating whether the thing type is deprecated, and a date and time when it was deprecated.

Type: ThingTypeMetadata (p. 439) object

thingTypeName (p. 136)

The name of the thing type.

Type: String


Pattern: [a-zA-Z0-9:-_]+

thingTypeProperties (p. 136)

The ThingTypeProperties contains information about the thing type including description, and a list of searchable thing attribute names.

Type: ThingTypeProperties (p. 440) object

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
**DetachPolicy**

Service: AWS IoT

Detaches a policy from the specified target.

**Request Syntax**

```
POST /target-policies/{policyName} HTTP/1.1
Content-type: application/json
{
  "target": "string"
}
```

**URI Request Parameters**

The request requires the following URI parameters.

**policyName (p. 139)**

The policy to detach.


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

**Request Body**

The request accepts the following data in JSON format.

**target (p. 139)**

The target from which the policy will be detached.

Type: String

Required: Yes

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

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

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500
InvalidRequestException
The request is not valid.
HTTP Status Code: 400

LimitExceededException
The number of attached entities exceeds the limit.
HTTP Status Code: 410

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DetachPrincipalPolicy

Service: AWS IoT

Removes the specified policy from the specified certificate.

Note: This API is deprecated. Please use DetachPolicy (p. 139) instead.

Request Syntax

DELETE /principal-policies/policyName HTTP/1.1
x-amzn-iot-principal: principal

URI Request Parameters

The request requires the following URI parameters.

policyName (p. 141)

The name of the policy to detach.


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

principal (p. 141)

The principal.

If the principal is a certificate, specify the certificate ARN. If the principal is an Amazon Cognito identity, specify the identity ID.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400
ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DetachThingPrincipal

Service: AWS IoT

Detaches the specified principal from the specified thing.

Request Syntax

DELETE /things/thingName/principals HTTP/1.1
x-amzn-principal: principal

URI Request Parameters

The request requires the following URI parameters.

principal (p. 143)

If the principal is a certificate, this value must be ARN of the certificate. If the principal is an Amazon Cognito identity, this value must be the ID of the Amazon Cognito identity.

thingName (p. 143)

The name of the thing.


Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.
HTTP Status Code: 404
_ServiceUnavailableException_

The service is temporarily unavailable.

HTTP Status Code: 503
_ThrottlingException_

The rate exceeds the limit.

HTTP Status Code: 429
_UnauthorizedException_

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DisableTopicRule

Service: AWS IoT

Disables the rule.

Request Syntax

```
POST /rules/`ruleName`/disable HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

`ruleName (p. 145)`

The name of the rule to disable.

- Pattern: `^[a-zA-Z0-9_]+$`

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

- `InternalException`
  - An unexpected error has occurred.
    - HTTP Status Code: 500
- `InvalidRequestException`
  - The request is not valid.
    - HTTP Status Code: 400
- `ServiceUnavailableException`
  - The service is temporarily unavailable.
    - HTTP Status Code: 503
- `UnauthorizedException`
  - You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
**EnableTopicRule**

Service: AWS IoT

Enables the rule.

**Request Syntax**

```
POST /rules/ruleName/enable HTTP/1.1
```

**URI Request Parameters**

The request requires the following URI parameters.

`ruleName (p. 147)`

The name of the topic rule to enable.


Pattern: `^[a-zA-Z0-9_]+$`

**Request Body**

The request does not have a request body.

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

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

**Errors**

*InternalException*

An unexpected error has occurred.

HTTP Status Code: 500

*InvalidRequestException*

The request is not valid.

HTTP Status Code: 400

*ServiceUnavailableException*

The service is temporarily unavailable.

HTTP Status Code: 503

*UnauthorizedException*

You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetEffectivePolicies
Service: AWS IoT
Gets effective policies.

Request Syntax
POST /effective-policies?thingName=thingName HTTP/1.1
Content-type: application/json
{
    "cognitoIdentityPoolId": "string",
    "principal": "string"
}

URI Request Parameters
The request requires the following URI parameters.

thingName (p. 149)
The thing name.
Pattern: [a-zA-Z0-9:-]+

Request Body
The request accepts the following data in JSON format.

cognitoIdentityPoolId (p. 149)
The Cognito identity pool ID.
Type: String
Required: No

principal (p. 149)
The principal.
Type: String
Required: No

Response Syntax
HTTP/1.1 200
Content-type: application/json
{
    "effectivePolicies": [
    {
        "policyArn": "string",
        "policyDocument": "string",
        "policyName": "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.

effectivePolicies (p. 149)

The effective policies.
Type: Array of EffectivePolicy (p. 377) objects

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

LimitExceededException
The number of attached entities exceeds the limit.
HTTP Status Code: 410

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
GetIndexingConfiguration
Service: AWS IoT

Gets the search configuration.

Request Syntax

GET /indexing/config HTTP/1.1

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  "thingIndexingConfiguration": {  "thingIndexingMode": "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.

thingIndexingConfiguration (p. 152)

Thing indexing configuration.

Type: ThingIndexingConfiguration (p. 437) object

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetJobDocument

Service: AWS IoT

Gets a job document.

Request Syntax

GET /jobs/jobId/job-document HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

jobId (p. 154)
The unique identifier you assigned to this job when it was created.
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [a-zA-Z0-9-_]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json
{
  "document": "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.

document (p. 154)

  The job document content.
  Type: String
  Length Constraints: Maximum length of 32768.

Errors

InvalidRequestException

The request is not valid.
HTTP Status Code: 400
**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404
**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetLoggingOptions
Service: AWS IoT

Gets the logging options.

Request Syntax

GET /loggingOptions HTTP/1.1

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

```json
{
   "logLevel": "string",
   "roleArn": "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.

**logLevel (p. 156)**

   The logging level.

   Type: String

   Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

**roleArn (p. 156)**

   The ARN of the IAM role that grants access.

   Type: String

Errors

**InternalException**

   An unexpected error has occurred.

   HTTP Status Code: 500
InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetOTAUpdate

Service: AWS IoT

Gets an OTA update.

Request Syntax

GET /otaUpdates/otaUpdateId HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

otaUpdateId (p. 158)

The OTA update ID.


Pattern: [a-zA-Z0-9_—]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "otaUpdateInfo": {
    "additionalParameters": {
      "string" : "string"
    },
    "awsIotJobArn": "string",
    "awsIotJobId": "string",
    "creationDate": number,
    "description": "string",
    "errorInfo": {
      "code": "string",
      "message": "string"
    },
    "lastModifiedDate": number,
    "otaUpdateArn": "string",
    "otaUpdateFiles": []
  }
}
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.

otaUpdateInfo (p. 158)

The OTA update info.

Type: OTAUpdateInfo (p. 407) object

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.
HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetPolicy

Service: AWS IoT

Gets information about the specified policy with the policy document of the default version.

Request Syntax

GET /policies/policyName HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

policyName (p. 161)

The name of the policy.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "defaultVersionId": "string",
  "policyArn": "string",
  "policyDocument": "string",
  "policyName": "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.

defaultVersionId (p. 161)

The default policy version ID.

Type: String

Pattern: [0-9]+ 

policyArn (p. 161)

The policy ARN.

Type: String
**policyDocument (p. 161)**

The JSON document that describes the policy.

Type: String

**policyName (p. 161)**

The policy name.

Type: String


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

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
GetPolicyVersion

Service: AWS IoT

Gets information about the specified policy version.

Request Syntax

GET /policies/policyName/version/policyVersionId HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

policyName (p. 164)

The name of the policy.


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

dolicyVersionId (p. 164)

The policy version ID.

Pattern: [0-9]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "isDefaultVersion": boolean,
   "policyArn": "string",
   "policyDocument": "string",
   "policyName": "string",
   "policyVersionId": "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.

isDefaultVersion (p. 164)

Specifies whether the policy version is the default.

Type: Boolean
**policyArn (p. 164)**

The policy ARN.

Type: String

**policyDocument (p. 164)**

The JSON document that describes the policy.

Type: String

**policyName (p. 164)**

The policy name.

Type: String


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

**policyVersionId (p. 164)**

The policy version ID.

Type: String

Pattern: \[0-9]+

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetRegistrationCode
Service: AWS IoT

Gets a registration code used to register a CA certificate with AWS IoT.

Request Syntax

```
GET /registrationcode HTTP/1.1
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
{
   "registrationCode": "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.

`registrationCode` (p. 167)

- The CA certificate registration code.
- Type: String
- Length Constraints: Fixed length of 64.
- Pattern: `(0x)?[a-zA-F0-9]`+

Errors

- `InternalFailureException`
  - An unexpected error has occurred.
  - HTTP Status Code: 500

- `InvalidRequestException`
  - The request is not valid.
  - HTTP Status Code: 400
ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetTopicRule

Service: AWS IoT

Gets information about the rule.

Request Syntax

GET /rules/ruleName HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

ruleName (p. 169)

The name of the rule.


Pattern: ^[a-zA-Z0-9_]+$

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "rule": {  
    "actions": [  
      {  
        "cloudwatchAlarm": {  
          "alarmName": "string",  
          "roleArn": "string",  
          "stateReason": "string",  
          "stateValue": "string"  
        },  
        "cloudwatchMetric": {  
          "metricName": "string",  
          "metricNamespace": "string",  
          "metricTimestamp": "string",  
          "metricUnit": "string",  
          "metricValue": "string",  
          "roleArn": "string"  
        },  
        "dynamoDB": {  
          "hashKeyField": "string",  
          "hashKeyType": "string",  
          "hashKeyValue": "string",  
          "operation": "string",  
          "payloadField": "string",  
          "rangeKeyField": "string",  
          "rangeKeyType": "string",  
          "rangeKeyValue": "string",  
          "roleArn": "string"  
        }  
      ]  
    }  
}
"tableName": "string",
"dynamoDBv2": {
  "putItem": {
    "tableName": "string",
    "roleArn": "string"
  },
  "elasticsearch": {
    "endpoint": "string",
    "id": "string",
    "index": "string",
    "roleArn": "string",
    "type": "string"
  },
  "firehose": {
    "deliveryStreamName": "string",
    "roleArn": "string",
    "separator": "string"
  },
  "iotAnalytics": {
    "channelArn": "string",
    "channelName": "string",
    "roleArn": "string"
  },
  "kinesis": {
    "partitionKey": "string",
    "roleArn": "string",
    "streamName": "string"
  },
  "lambda": {
    "functionArn": "string"
  },
  "republish": {
    "roleArn": "string",
    "topic": "string"
  },
  "s3": {
    "bucketName": "string",
    "cannedAcl": "string",
    "key": "string",
    "roleArn": "string"
  },
  "salesforce": {
    "token": "string",
    "url": "string"
  },
  "sns": {
    "messageFormat": "string",
    "roleArn": "string",
    "targetArn": "string"
  },
  "sqs": {
    "queueUrl": "string",
    "roleArn": "string",
    "useBase64": boolean
  }
},
"awsIoTSqlVersion": "string",
"createdAt": number,
"description": "string",
"errorAction": {
  "cloudwatchAlarm": {
    "alarmName": "string",
    "roleArn": "string"
  }
}
"stateReason": "string",
"stateValue": "string"
},
"cloudwatchMetric": {
  "metricName": "string",
  "metricNamespace": "string",
  "metricTimestamp": "string",
  "metricUnit": "string",
  "metricValue": "string",
  "roleArn": "string"
},
"dynamoDB": {
  "hashKeyField": "string",
  "hashKeyType": "string",
  "hashKeyValue": "string",
  "operation": "string",
  "payloadField": "string",
  "rangeKeyField": "string",
  "rangeKeyType": "string",
  "rangeKeyValue": "string",
  "roleArn": "string",
  "tableName": "string"
},
"dynamoDBv2": {
  "putItem": {
    "tableName": "string"
  },
  "roleArn": "string"
},
"elasticsearch": {
  "endpoint": "string",
  "id": "string",
  "index": "string",
  "roleArn": "string",
  "type": "string"
},
"firehose": {
  "deliveryStreamName": "string",
  "roleArn": "string",
  "separator": "string"
},
"iotAnalytics": {
  "channelArn": "string",
  "channelName": "string",
  "roleArn": "string"
},
"kinesis": {
  "partitionKey": "string",
  "roleArn": "string",
  "streamName": "string"
},
"lambda": {
  "functionArn": "string"
},
"republish": {
  "roleArn": "string",
  "topic": "string"
},
"s3": {
  "bucketName": "string",
  "cannedAcl": "string",
  "key": "string",
  "roleArn": "string"
},
"salesforce": {
  "token": "string"}
"url": "string",
"sns": {
  "messageFormat": "string",
  "roleArn": "string",
  "targetArn": "string"
},
"sqs": {
  "queueUrl": "string",
  "roleArn": "string",
  "useBase64": boolean
},
"ruleDisabled": boolean,
"ruleName": "string",
"sql": "string"
"ruleArn": "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.

**rule (p. 169)**

The rule.

Type: [TopicRule (p. 441)](#) object

**ruleArn (p. 169)**

The rule ARN.

Type: String

**Errors**

**InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetV2LoggingOptions

Service: AWS IoT

Gets the fine grained logging options.

Request Syntax

GET /v2LoggingOptions HTTP/1.1

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "defaultLogLevel": "string",
  "disableAllLogs": boolean,
  "roleArn": "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.

defaultLogLevel (p. 174)

The default log level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED
disableAllLogs (p. 174)

Disables all logs.

Type: Boolean

roleArn (p. 174)

The IAM role ARN AWS IoT uses to write to your CloudWatch logs.

Type: String

Errors

InternalException

An unexpected error has occurred.
HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

### See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListAttachedPolicies

Service: AWS IoT

Lists the policies attached to the specified thing group.

Request Syntax

```
POST /attached-policies/target?marker=marker&pageSize=pageSize&recursive=recursive HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**marker (p. 176)**

The token to retrieve the next set of results.

Pattern: \[A-Za-z0-9+/\]+={0,2}

**pageSize (p. 176)**

The maximum number of results to be returned per request.


**recursive (p. 176)**

When true, recursively list attached policies.

**target (p. 176)**

The group for which the policies will be listed.

Request Body

The request does not have a request body.

Response Syntax

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

{
    "nextMarker": "string",
    "policies": [
        {
            "policyArn": "string",
            "policyName": "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.
nextMarker (p. 176)
The token to retrieve the next set of results, or `null` if there are no more results.
Type: String
Pattern: `[A-Za-z0-9+/]++(0,2)]
policies (p. 176)
The policies.
Type: Array of Policy (p. 413) objects

Errors
InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500
InvalidRequestException
The request is not valid.
HTTP Status Code: 400
LimitExceededException
The number of attached entities exceeds the limit.
HTTP Status Code: 410
ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404
ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503
ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429
UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS Command Line Interface
ListAttachedPolicies

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListAuthorizers
Service: AWS IoT

Lists the authorizers registered in your account.

Request Syntax

```
GET /authorizers/?
isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize&status=status HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

- **ascendingOrder (p. 179)**
  - Return the list of authorizers in ascending alphabetical order.

- **marker (p. 179)**
  - A marker used to get the next set of results.
  - Pattern: `[A-Za-z0-9+/*]{0,2}`

- **pageSize (p. 179)**
  - The maximum number of results to return at one time.

- **status (p. 179)**
  - The status of the list authorizers request.
  - Valid Values: ACTIVE | INACTIVE

Request Body

The request does not have a request body.

Response Syntax

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

{
   "authorizers": [
      {
         "authorizerArn": "string",
         "authorizerName": "string"
      }
   ],
   "nextMarker": "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.

**authorizers (p. 179)**

The authorizers.

Type: Array of AuthorizerSummary (p. 357) objects

**nextMarker (p. 179)**

A marker used to get the next set of results.

Type: String

Pattern: [A-Za-z0-9+/]++(0, 2)

## Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## 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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V2
ListCACertificates
Service: AWS IoT

Lists the CA certificates registered for your AWS account.
The results are paginated with a default page size of 25. You can use the returned marker to retrieve additional results.

Request Syntax

```
GET /cacertificates?isAscendingOrder=ascEndOrder&marker=marker&pageSize=pageSize
HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

- **ascendingOrder** (p. 182)
  Determines the order of the results.
- **marker** (p. 182)
  The marker for the next set of results.
  Pattern: \[A-Za-z0-9+/-]*\={0,2}
- **pageSize** (p. 182)
  The result page size.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "certificates": [
    { "certificateArn": "string",
    "certificateId": "string",
    "creationDate": number,
    "status": "string"
  },
  "nextMarker": "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.

**certificates (p. 182)**

The CA certificates registered in your AWS account.

Type: Array of **CACertificate (p. 359)** objects

**nextMarker (p. 182)**

The current position within the list of CA certificates.

Type: String

Pattern: `[A-Za-z0-9+/]++{0,2}

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
AWS SDK for Ruby V2
ListCertificates

Service: AWS IoT

Lists the certificates registered in your AWS account.

The results are paginated with a default page size of 25. You can use the returned marker to retrieve additional results.

Request Syntax

GET /certificates?isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

ascendingOrder (p. 185)

Specifies the order for results. If True, the results are returned in ascending order, based on the creation date.

marker (p. 185)

The marker for the next set of results.

Pattern: [A-Za-z0-9+/]+={0,2}

pageSize (p. 185)

The result page size.


Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  "certificates": [  {  "certificateArn": "string",  "certificateId": "string",  "creationDate": number,  "status": "string"  }  ],  "nextMarker": "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.

**certificates (p. 185)**

The descriptions of the certificates.

Type: Array of Certificate (p. 362) objects

**nextMarker (p. 185)**

The marker for the next set of results, or null if there are no additional results.

Type: String

Pattern: [A-Za-z0-9+/]++(0, 2)

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
AWS IoT API Reference

ListCertificates

- AWS SDK for Ruby V2
ListCertificatesByCA

Service: AWS IoT

List the device certificates signed by the specified CA certificate.

Request Syntax

GET /certificates-by-ca/caCertificateId?
isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

ascendingOrder (p. 188)

Specifies the order for results. If True, the results are returned in ascending order, based on the creation date.

cacertificateld (p. 188)

The ID of the CA certificate. This operation will list all registered device certificate that were signed by this CA certificate.

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+  

marker (p. 188)

The marker for the next set of results.

Pattern: [A-Za-z0-9+/?]+={0,2}  

pageSize (p. 188)

The result page size.


Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
"certificates": [  
  {  
   "certificateArn": "string",  
   "certificateId": "string",  
   "creationDate": number,  
   "status": "string"  
  }  
],  
"nextMarker": "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.

certificates (p. 188)
The device certificates signed by the specified CA certificate.
Type: Array of Certificate (p. 362) objects

nextMarker (p. 188)
The marker for the next set of results, or null if there are no additional results.
Type: String
Pattern: [A-Za-z0-9+/]=\{0,2\}

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
**ListIndices**

Service: AWS IoT

Lists the search indices.

**Request Syntax**

```
GET /indices?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

**URI Request Parameters**

The request requires the following URI parameters.

- **maxResults (p. 191)**
  
  The maximum number of results to return at one time.


- **nextToken (p. 191)**
  
  The token used to get the next set of results, or null if there are no additional results.

**Request Body**

The request does not have a request body.

**Response Syntax**

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

{
    "indexNames": [ "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.

- **indexNames (p. 191)**
  
  The index names.

  Type: Array of strings


  Pattern: [a-zA-Z0-9_:–]+

- **nextToken (p. 191)**
  
  The token used to get the next set of results, or null if there are no additional results.
Type: String

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListJobExecutionsForJob

Service: AWS IoT

Lists the job executions for a job.

Request Syntax

GET /jobs/jobId/things?maxResults=maxResults&nextToken=nextToken&status=status HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

jobId (p. 193)

The unique identifier you assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-_.]+

maxResults (p. 193)

The maximum number of results to be returned per request.


nextToken (p. 193)

The token to retrieve the next set of results.

status (p. 193)

The status of the job.

Valid Values: QUEUED | IN_PROGRESS | SUCCEEDED | FAILED | REJECTED | REMOVED | CANCELED

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "executionSummaries": [   
    {   
      "jobExecutionSummary": {   
        "executionNumber": number,   
        "lastUpdatedAt": number,   
        "queuedAt": number,   
        "startedAt": number,   
        "status": "string"   
      },   
      "thingArn": "string"   
    }   
  ]
}
ListJobExecutionsForJob

```
}

"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.

**executionSummaries** (p. 193)

A list of job execution summaries.

Type: Array of `JobExecutionSummaryForJob` (p. 394) objects

**nextToken** (p. 193)

The token for the next set of results, or `null` if there are no additional results.

Type: String

Errors

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
ListJobExecutionsForThing
Service: AWS IoT

Lists the job executions for the specified thing.

Request Syntax

GET /things/thingName/jobs?maxResults=maxResults&nextToken=nextToken&status=status HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 196)

The maximum number of results to be returned per request.


nextToken (p. 196)

The token to retrieve the next set of results.

status (p. 196)

An optional filter that lets you search for jobs that have the specified status.

Valid Values: QUEUED | IN_PROGRESS | SUCCEEDED | FAILED | REJECTED | REMOVED | CANCELED

thingName (p. 196)

The thing name.


Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "executionSummaries": [
    {  
      "jobExecutionSummary": {
        "executionNumber": number,
        "lastUpdatedAt": number,
        "queuedAt": number,
        "startedAt": number,
        "status": "String"
      },
      "jobId": "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.

executionSummaries (p. 196)

A list of job execution summaries.

Type: Array of JobExecutionSummaryForThing (p. 395) objects

nextToken (p. 196)

The token for the next set of results, or null if there are no additional results.

Type: String

Errors

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
ListJobs

Service: AWS IoT

Lists jobs.

Request Syntax

GET /jobs?
maxResults=maxResults&nextToken=nextToken&status=status&targetSelection=targetSelection&thingGroupId=thingGroupId&thingGroupName=thingGroupName
HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 199)

The maximum number of results to return per request.


nextToken (p. 199)

The token to retrieve the next set of results.

status (p. 199)

An optional filter that lets you search for jobs that have the specified status.

Valid Values: IN_PROGRESS | CANCELED | COMPLETED

targetSelection (p. 199)

Specifies whether the job will continue to run (CONTINUOUS), or will be complete after all those things specified as targets have completed the job (SNAPSHOT). If continuous, the job may also be run on a thing when a change is detected in a target. For example, a job will run on a thing when the thing is added to a target group, even after the job was completed by all things originally in the group.

Valid Values: CONTINUOUS | SNAPSHOT

thingGroupId (p. 199)

A filter that limits the returned jobs to those for the specified group.


Pattern: [a-zA-Z0-9\-]+

thingGroupName (p. 199)

A filter that limits the returned jobs to those for the specified group.


Pattern: [a-zA-Z0-9:._-]+
Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "jobs": [
    {
      "completedAt": number,
      "createdAt": number,
      "jobArn": "string",
      "jobId": "string",
      "lastUpdatedAt": number,
      "status": "string",
      "targetSelection": "string",
      "thingGroupId": "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.

jobs (p. 200)

A list of jobs.

Type: Array of JobSummary (p. 398) objects

nextToken (p. 200)

The token for the next set of results, or null if there are no additional results.

Type: String

Errors

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.
HTTP Status Code: 429

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListOTAUpdates
Service: AWS IoT
Lists OTA updates.

Request Syntax

GET /otaUpdates?maxResults=maxResults&nextToken=nextToken&otaUpdateStatus=otaUpdateStatus
HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 202)
The maximum number of results to return at one time.

nextToken (p. 202)
A token used to retrieve the next set of results.

otaUpdateStatus (p. 202)
The OTA update job status.
Valid Values: CREATE_PENDING | CREATE_IN_PROGRESS | CREATE_COMPLETE | CREATE_FAILED

Request Body
The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "nextToken": "string",
    "otaUpdates": [
        {
            "creationDate": number,
            "otaUpdateArn": "string",
            "otaUpdateId": "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 (p. 202)**

A token to use to get the next set of results.

Type: String

**otaUpdates (p. 202)**

A list of OTA update jobs.

Type: Array of OTAUpdateSummary (p. 410) objects

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListOutgoingCertificates

Service: AWS IoT

Lists certificates that are being transferred but not yet accepted.

Request Syntax

GET /certificates-out-going?isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize
HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

ascendingOrder (p. 204)
Specifies the order for results. If True, the results are returned in ascending order, based on the creation date.

marker (p. 204)
The marker for the next set of results.

Pattern: [A-Za-z0-9+/]+={0,2}

pageSize (p. 204)
The result page size.


Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "nextMarker": "string",
   "outgoingCertificates": [
   {
      "certificateArn": "string",
      "certificateId": "string",
      "creationDate": number,
      "transferDate": number,
      "transferMessage": "string",
      "transferredTo": "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.

nextMarker (p. 204)

The marker for the next set of results.
Type: String
Pattern: [A-Za-z0-9+/]+={0,2}

outgoingCertificates (p. 204)

The certificates that are being transferred but not yet accepted.
Type: Array of OutgoingCertificate (p. 411) objects

Errors

InternalFailureException

An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException

The request is not valid.
HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V2
ListPolicies

Service: AWS IoT

Lists your policies.

Request Syntax

GET /policies?isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

ascendingOrder (p. 207)

Specifies the order for results. If true, the results are returned in ascending creation order.

marker (p. 207)

The marker for the next set of results.

Pattern: [A-Za-z0-9+/]={0,2}

pageSize (p. 207)

The result page size.


Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "nextMarker": "string",
  "policies": [
    {
      "policyArn": "string",
      "policyName": "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.

nextMarker (p. 207)

The marker for the next set of results, or null if there are no additional results.
Type: String
Pattern: [A-Za-z0-9+/\]+={0,2}

**policies (p. 207)**

The descriptions of the policies.

Type: Array of **Policy (p. 413)** objects

## Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

## 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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListPolicyPrincipals

Service: AWS IoT

Lists the principals associated with the specified policy.

Note: This API is deprecated. Please use ListTargetsForPolicy (p. 223) instead.

Request Syntax

GET /policy-principals?isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize
HTTP/1.1
x-amzn-iot-policy: policyName

URI Request Parameters

The request requires the following URI parameters.

ascendingOrder (p. 209)

Specifies the order for results. If true, the results are returned in ascending creation order.

marker (p. 209)

The marker for the next set of results.

Pattern: [A-Za-z0-9+/]+={0,2}

pageSize (p. 209)

The result page size.


policyName (p. 209)

The policy name.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "nextMarker": "string",
    "principals": [ "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.

**nextMarker (p. 209)**

The marker for the next set of results, or null if there are no additional results.

Type: String

Pattern: [A-Za-z0-9+/]{0,2}

**principals (p. 209)**

The descriptions of the principals.

Type: Array of strings

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
AWS SDK for Java
AWS SDK for JavaScript
AWS SDK for PHP V3
AWS SDK for Python
AWS SDK for Ruby V2
ListPolicyVersions
Service: AWS IoT
Lists the versions of the specified policy and identifies the default version.

Request Syntax

GET /policies/policyName/version HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

policyName (p. 212)
The policy name.
Pattern: [\w+=,.@-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
    "policyVersions": [
        
    ]
}

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.

policyVersions (p. 212)
The policy versions.
Type: Array of PolicyVersion (p. 414) objects

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
**ListPrincipalPolicies**

Service: AWS IoT

Lists the policies attached to the specified principal. If you use an Cognito identity, the ID must be in AmazonCognito Identity format.

**Note:** This API is deprecated. Please use ListAttachedPolicies (p. 176) instead.

**Request Syntax**

```
GET /principal-policies?isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize
HTTP/1.1
x-amzn-iot-principal: principal
```

**URI Request Parameters**

The request requires the following URI parameters.

- **ascendingOrder (p. 214)**
  
  Specifies the order for results. If true, results are returned in ascending creation order.

- **marker (p. 214)**
  
  The marker for the next set of results.

  Pattern: `[A-Za-z0-9+/]=\{0,2\}`

- **pageSize (p. 214)**
  
  The result page size.


- **principal (p. 214)**
  
  The principal.

**Request Body**

The request does not have a request body.

**Response Syntax**

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

{  
  "nextMarker": "string",
  "policies": [  
    {  
      "policyArn": "string",
      "policyName": "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.

nextMarker (p. 214)

The marker for the next set of results, or null if there are no additional results.

Type: String

Pattern: [A-Za-z0-9+/]+={0,2}

policies (p. 214)

The policies.

Type: Array of Policy (p. 413) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
**ListPrincipalThings**

Service: AWS IoT

Lists the things associated with the specified principal.

**Request Syntax**

```
GET /principals/things?maxResults={maxResults}&nextToken={nextToken} HTTP/1.1
x-amzn-principal: principal
```

**URI Request Parameters**

The request requires the following URI parameters.

- **maxResults (p. 217)**
  
  The maximum number of results to return in this operation.
  

- **nextToken (p. 217)**
  
  The token used to get the next set of results, or null if there are no additional results.

- **principal (p. 217)**
  
  The principal.

**Request Body**

The request does not have a request body.

**Response Syntax**

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

{
  "nextToken": "string",
  "things": [ "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 (p. 217)**
  
  The token used to get the next set of results, or null if there are no additional results.

  Type: String

- **things (p. 217)**
  
  The things.
Type: Array of strings
Pattern: [a-zA-Z0-9:_-]+

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListRoleAliases
Service: AWS IoT

Lists the role aliases registered in your account.

Request Syntax

```
GET /role-aliases?isAscendingOrder=ascendingOrder&marker=marker&pageSize=pageSize HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

- **ascendingOrder (p. 219)**
  - Return the list of role aliases in ascending alphabetical order.

- **marker (p. 219)**
  - A marker used to get the next set of results.
  - Pattern: [A-Za-z0-9+/]+={0,2}

- **pageSize (p. 219)**
  - The maximum number of results to return at one time.

Request Body

The request does not have a request body.

Response Syntax

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

{
   "nextMarker": "string",
   "roleAliases": [ "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.

- **nextMarker (p. 219)**
  - A marker used to get the next set of results.
  - Type: String
  - Pattern: [A-Za-z0-9+/]+={0,2}
roleAliases (p. 219)

The role aliases.

Type: Array of strings


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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListStreams
Service: AWS IoT
Lists all of the streams in your AWS account.

Request Syntax

GET /streams?isAscendingOrder=ascendingOrder&maxResults=maxResults&nextToken=nextToken
HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

ascendingOrder (p. 221)
Set to true to return the list of streams in ascending order.

maxResults (p. 221)
The maximum number of results to return at a time.

nextToken (p. 221)
A token used to get the next set of results.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "nextToken": "string",
  "streams": [
    {
      "description": "string",
      "streamArn": "string",
      "streamId": "string",
      "StreamVersion": number
    }
  ]
}

Response Elements

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

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

nextToken (p. 221)
A token used to get the next set of results.
Type: String
streams (p. 221)

A list of streams.

Type: Array of StreamSummary (p. 430) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
**ListTargetsForPolicy**

Service: AWS IoT

List targets for the specified policy.

**Request Syntax**

```plaintext
POST /policy-targets/policyName?marker=marker&pageSize=pageSize HTTP/1.1
```

**URI Request Parameters**

The request requires the following URI parameters.

- **marker (p. 223)**
  
  A marker used to get the next set of results.
  
  Pattern: [A-Za-z0-9+/]+=\{0,2\}

- **pageSize (p. 223)**
  
  The maximum number of results to return at one time.
  

- **policyName (p. 223)**
  
  The policy name.
  
  
  Pattern: \[\w+=,.@-\]+

**Request Body**

The request does not have a request body.

**Response Syntax**

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

{
  "nextMarker": "string",
  "targets": [ "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.

- **nextMarker (p. 223)**
  
  A marker used to get the next set of results.
Type: String

Pattern: [A-Za-z0-9+/]=\{0,2\}

**targets (p. 223)**

The policy targets.

Type: Array of strings

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**LimitExceededException**

The number of attached entities exceeds the limit.

HTTP Status Code: 410

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
ListThingGroups

Service: AWS IoT

List the thing groups in your account.

Request Syntax

GET /thing-groups?
maxResults=maxResults&namePrefixFilter=namePrefixFilter&nextToken=nextToken&parentGroup=parentGroup&recursive=recursive
HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 226)

The maximum number of results to return at one time.


namePrefixFilter (p. 226)

A filter that limits the results to those with the specified name prefix.


Pattern: [a-zA-Z0-9:_-]+

nextToken (p. 226)

The token used to get the next set of results, or null if there are no additional results.

parentGroup (p. 226)

A filter that limits the results to those with the specified parent group.


Pattern: [a-zA-Z0-9:_-]+

recursive (p. 226)

If true, return child groups as well.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "nextToken": "string",
   "thingGroups": [
      {
         "groupArn": "string",
         "groupName": "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 (p. 226)**

The token used to get the next set of results, or null if there are no additional results.

Type: String

**thingGroups (p. 226)**

The thing groups.

Type: Array of GroupNameAndArn (p. 382) objects

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListThingGroupsForThing

Service: AWS IoT

List the thing groups to which the specified thing belongs.

Request Syntax

```
GET /things/thingName/thing-groups?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

- **maxResults (p. 228)**
  The maximum number of results to return at one time.

- **nextToken (p. 228)**
  The token used to get the next set of results, or `null` if there are no additional results.

- **thingName (p. 228)**
  The thing name.
  Pattern: `[a-zA-Z0-9:_-]+`

Request Body

The request does not have a request body.

Response Syntax

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

{
    "nextToken": "string",
    "thingGroups": [
        {
            "groupArn": "string",
            "groupName": "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 (p. 228)

The token used to get the next set of results, or null if there are no additional results.

Type: String

thingGroups (p. 228)

The thing groups.

Type: Array of GroupNameAndArn (p. 382) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListThingPrincipals
Service: AWS IoT

Lists the principals associated with the specified thing.

Request Syntax

GET /things/thingName/principals HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

thingName (p. 230)

The name of the thing.

Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  "principals": [ "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.

principals (p. 230)

The principals associated with the thing.

Type: Array of strings

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500
InvalidRequestException

   The request is not valid.

   HTTP Status Code: 400

ResourceNotFoundException

   The specified resource does not exist.

   HTTP Status Code: 404

ServiceUnavailableException

   The service is temporarily unavailable.

   HTTP Status Code: 503

ThrottlingException

   The rate exceeds the limit.

   HTTP Status Code: 429

UnauthorizedException

   You are not authorized to perform this operation.

   HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListThingRegistrationTaskReports

Service: AWS IoT

Information about the thing registration tasks.

Request Syntax

```
GET /thing-registration-tasks/taskId/reports?
maxResults=maxResults&nextToken=nextToken&reportType=reportType HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**maxResults (p. 232)**

The maximum number of results to return per request.


**nextToken (p. 232)**

The token to retrieve the next set of results.

**reportType (p. 232)**

The type of task report.

Valid Values:  ERRORS | RESULTS

**taskId (p. 232)**

The id of the task.

Length Constraints: Maximum length of 40.

Request Body

The request does not have a request body.

Response Syntax

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

{  
  "nextToken": "string",
  "reportType": "string",
  "resourceLinks": [ "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 (p. 232)

The token to retrieve the next set of results.

Type: String

reportType (p. 232)

The type of task report.

Type: String

Valid Values: ERRORS | RESULTS

resourceLinks (p. 232)

Links to the task resources.

Type: Array of strings

Length Constraints: Maximum length of 65535.

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V2
ListThingRegistrationTasks
Service: AWS IoT

List bulk thing provisioning tasks.

Request Syntax

```plaintext
GET /thing-registration-tasks?maxResults=maxResults&nextToken=nextToken&status=status 
HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**maxResults (p. 235)**

The maximum number of results to return at one time.


**nextToken (p. 235)**

The token used to get the next set of results, or `null` if there are no additional results.

**status (p. 235)**

The status of the bulk thing provisioning task.

Valid Values: InProgress | Completed | Failed | Cancelled | Cancelling

Request Body

The request does not have a request body.

Response Syntax

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

{
    "nextToken": "string",
    "taskIds": [ "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 (p. 235)**

The token used to get the next set of results, or `null` if there are no additional results.

Type: String
taskIds (p. 235)

A list of bulk thing provisioning task IDs.
Type: Array of strings
Length Constraints: Maximum length of 40.

Errors

**InternalFailureException**

An unexpected error has occurred.
HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.
HTTP Status Code: 400

**ThrottlingException**

The rate exceeds the limit.
HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListThings
Service: AWS IoT

Lists your things. Use the attributeName and attributeValue parameters to filter your things. For example, calling ListThings with attributeName=Color and attributeValue=Red retrieves all things in the registry that contain an attribute Color with the value Red.

Request Syntax

GET /things?
attributeName=attributeName&attributeValue=attributeValue&maxResults=maxResults&nextToken=nextToken&thingTypeName=thingTypeName
HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

attributeName (p. 237)
The attribute name used to search for things.
Length Constraints: Maximum length of 128.
Pattern: [a-zA-Z0-9_.,@/:#-]+

attributeValue (p. 237)
The attribute value used to search for things.
Length Constraints: Maximum length of 800.
Pattern: [a-zA-Z0-9_.,@/:#-]*

maxResults (p. 237)
The maximum number of results to return in this operation.

nextToken (p. 237)
The token used to get the next set of results, or null if there are no additional results.

thingTypeName (p. 237)
The name of the thing type used to search for things.
Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json
AWS IoT API Reference

ListThings

```json
{
  "nextToken": "string",
  "things": [
    {
      "attributes": {
        "string": "string"
      },
      "thingArn": "string",
      "thingName": "string",
      "thingTypeName": "string",
      "version": number
    }
  ]
}
```

Response Elements

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

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

nextToken (p. 237)

The token used to get the next set of results, or null if there are no additional results.

Type: String

things (p. 237)

The things.

Type: Array of ThingAttribute (p. 431) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListThingsInThingGroup

Service: AWS IoT

Lists the things in the specified group.

Request Syntax

GET /thing-groups/thingGroupName/things?maxResults=maxResults&nextToken=nextToken&recursive=recursive HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 240)

The maximum number of results to return at one time.


nextToken (p. 240)

The token used to get the next set of results, or null if there are no additional results.

recursive (p. 240)

When true, list things in this thing group and in all child groups as well.

thingGroupName (p. 240)

The thing group name.


Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "nextToken": "string",
  "things": [ "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 (p. 240)

The token used to get the next set of results, or null if there are no additional results.
Type: String

**things (p. 240)**

The things in the specified thing group.

Type: Array of strings


Pattern: `[a-zA-Z0-9:_-]+`

## Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

## See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListThingTypes
Service: AWS IoT
Lists the existing thing types.

Request Syntax
GET /thing-types?maxResults=maxResults&nextToken=nextToken&thingTypeName=thingTypeName
HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.

maxResults (p. 242)
The maximum number of results to return in this operation.

nextToken (p. 242)
The token for the next set of results, or null if there are no additional results.

thingTypeName (p. 242)
The name of the thing type.
Pattern: [a-zA-Z0-9:_-]+

Request Body
The request does not have a request body.

Response Syntax
HTTP/1.1 200
Content-type: application/json
{
  "nextToken": "string",
  "thingTypes": [
    {
      "thingTypeArn": "string",
      "thingTypeMetadata": {
        "creationDate": number,
        "deprecated": boolean,
        "deprecationDate": number
      },
      "thingTypeName": "string",
      "thingTypeProperties": {
        "searchableAttributes": ["string"],
        "thingTypeDescription": "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 (p. 242)

The token for the next set of results, or null if there are no additional results.

Type: String

thingTypes (p. 242)

The thing types.

Type: Array of ThingTypeDefinition (p. 438) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
ListTopicRules
Service: AWS IoT
Lists the rules for the specific topic.

Request Syntax

GET /rules?maxResults=maxResults&nextToken=nextToken&ruleDisabled=ruleDisabled&topic=topic
HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 245)

The maximum number of results to return.
Valid Range: Minimum value of 1. Maximum value of 10000.

nextToken (p. 245)

A token used to retrieve the next value.

ruleDisabled (p. 245)

Specifies whether the rule is disabled.

topic (p. 245)

The topic.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "nextToken": "string",
    "rules": [
        {
            "createdAt": number,
            "ruleArn": "string",
            "ruleDisabled": boolean,
            "ruleName": "string",
            "topicPattern": "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 (p. 245)**
A token used to retrieve the next value.
Type: String

**rules (p. 245)**
The rules.
Type: Array of TopicRuleListItem (p. 443) objects

**Errors**

**InternalException**
An unexpected error has occurred.
HTTP Status Code: 500

**InvalidRequestException**
The request is not valid.
HTTP Status Code: 400

**ServiceUnavailableException**
The service is temporarily unavailable.
HTTP Status Code: 503

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListV2LoggingLevels
Service: AWS IoT
Lists logging levels.

Request Syntax

```
GET /v2LoggingLevel?maxResults=\{maxResults\}&nextToken=\{nextToken\}&targetType=\{targetType\}
HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**maxResults (p. 247)**

The maximum number of results to return at one time.


**nextToken (p. 247)**

The token used to get the next set of results, or **null** if there are no additional results.

**targetType (p. 247)**

The type of resource for which you are configuring logging. Must be **THING_Group**.

Valid Values: **DEFAULT | THING_GROUP**

Request Body

The request does not have a request body.

Response Syntax

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

{  
    "logTargetConfigurations": [  
        {  
            "logLevel": "string",  
            "logTarget": {  
                "targetName": "string",  
                "targetType": "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.
logTargetConfigurations (p. 247)
The logging configuration for a target.
Type: Array of LogTargetConfiguration (p. 405) objects

nextToken (p. 247)
The token used to get the next set of results, or null if there are no additional results.
Type: String

Errors

InternalException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

NotConfiguredException
The resource is not configured.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
**RegisterCACertificate**

Service: AWS IoT

Registers a CA certificate with AWS IoT. This CA certificate can then be used to sign device certificates, which can be then registered with AWS IoT. You can register up to 10 CA certificates per AWS account that have the same subject field. This enables you to have up to 10 certificate authorities sign your device certificates. If you have more than one CA certificate registered, make sure you pass the CA certificate when you register your device certificates with the RegisterCertificate API.

**Request Syntax**

```
POST /cacertificate?allowAutoRegistration=allowAutoRegistration&setAsActive=setAsActive HTTP/1.1
Content-type: application/json

{
   "caCertificate": "string",
   "registrationConfig": {
      "roleArn": "string",
      "templateBody": "string"
   },
   "verificationCertificate": "string"
}
```

**URI Request Parameters**

The request requires the following URI parameters.

- **allowAutoRegistration (p. 249)**
  
  Allows this CA certificate to be used for auto registration of device certificates.

- **setAsActive (p. 249)**
  
  A boolean value that specifies if the CA certificate is set to active.

**Request Body**

The request accepts the following data in JSON format.

- **caCertificate (p. 249)**
  
  The CA certificate.
  
  Type: String
  
  
  Required: Yes

- **registrationConfig (p. 249)**
  
  Information about the registration configuration.
  
  Type: RegistrationConfig (p. 417) object
  
  Required: No

- **verificationCertificate (p. 249)**
  
  The private key verification certificate.
RegisterCACertificate

Type: String
Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json
{
  "certificateArn": "string",
  "certificateId": "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.

certificateArn (p. 250)
The CA certificate ARN.
  Type: String
certificateId (p. 250)
The CA certificate identifier.
  Type: String
  Length Constraints: Fixed length of 64.
  Pattern: (0x)?[a-fA-F0-9]+

Errors

CertificateValidationException
  The certificate is invalid.
  HTTP Status Code: 400
InternalFailureException
  An unexpected error has occurred.
  HTTP Status Code: 500
InvalidRequestException
  The request is not valid.
  HTTP Status Code: 400
LimitExceededException
  The number of attached entities exceeds the limit.
HTTP Status Code: 410
**CaughtException**

The registration code is invalid.

HTTP Status Code: 400
**ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409
**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429
**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RegisterCertificate

Service: AWS IoT

Registers a device certificate with AWS IoT. If you have more than one CA certificate that has the same subject field, you must specify the CA certificate that was used to sign the device certificate being registered.

Request Syntax

```
POST /certificate/register?setAsActive=setAsActive HTTP/1.1
Content-type: application/json

{
   "caCertificatePem": "string",
   "certificatePem": "string",
   "status": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

`setAsActive (p. 252)`

This parameter has been deprecated.

A boolean value that specifies if the CA certificate is set to active.

Request Body

The request accepts the following data in JSON format.

`caCertificatePem (p. 252)`

The CA certificate used to sign the device certificate being registered.

Type: String


Required: No

`certificatePem (p. 252)`

The certificate data, in PEM format.

Type: String


Required: Yes

`status (p. 252)`

The status of the register certificate request.

Type: String

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING_TRANSFER | REGISTER_INACTIVE | PENDING_ACTIVATION
Required: No

Response Syntax

```plaintext
HTTP/1.1 200
Content-type: application/json
{
   "certificateArn": "string",
   "certificateId": "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.

- **certificateArn (p. 253)**
  - The certificate ARN.
  - Type: String

- **certificateId (p. 253)**
  - The certificate identifier.
  - Type: String
  - Length Constraints: Fixed length of 64.
  - Pattern: (0x)?[a-zA-F0-9]+

Errors

- **CertificateConflictException**
  - Unable to verify the CA certificate used to sign the device certificate you are attempting to register. This is happens when you have registered more than one CA certificate that has the same subject field and public key.
  - HTTP Status Code: 409

- **CertificateStateException**
  - The certificate operation is not allowed.
  - HTTP Status Code: 406

- **CertificateValidationException**
  - The certificate is invalid.
  - HTTP Status Code: 400

- **InternalFailureException**
  - An unexpected error has occurred.
  - HTTP Status Code: 500
InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ResourceAlreadyExistsException
The resource already exists.
HTTP Status Code: 409

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RegisterThing
Service: AWS IoT
Provisions a thing.

Request Syntax

POST /things HTTP/1.1
Content-type: application/json

{
   "parameters": {
      "string" : "string"
   },
   "templateBody": "string"
}

URI Request Parameters
The request does not use any URI parameters.

Request Body
The request accepts the following data in JSON format.

parameters (p. 255)
The parameters for provisioning a thing. See Programmatic Provisioning for more information.

   Type: String to string map
   Required: No

templateBody (p. 255)
The provisioning template. See Programmatic Provisioning for more information.

   Type: String
   Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "certificatePem": "string",
   "resourceArns": {
      "string" : "string"
   }
}

Response Elements
If the action is successful, the service sends back an HTTP 200 response.
The following data is returned in JSON format by the service.

**certificatePem (p. 255)**

The PEM of a certificate.

Type: String


**resourceArns (p. 255)**

ARNs for the generated resources.

Type: String to string map

**Errors**

**ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceRegistrationFailureException**

The resource registration failed.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RejectCertificateTransfer

Service: AWS IoT

Rejects a pending certificate transfer. After AWS IoT rejects a certificate transfer, the certificate status changes from `PENDING_TRANSFER` to `INACTIVE`.

To check for pending certificate transfers, call `ListCertificates` to enumerate your certificates.

This operation can only be called by the transfer destination. After it is called, the certificate will be returned to the source's account in the `INACTIVE` state.

**Request Syntax**

```
PATCH /reject-certificate-transfer/certificateId HTTP/1.1
Content-type: application/json

{
    "rejectReason": "string"
}
```

**URI Request Parameters**

The request requires the following URI parameters.

- **certificateId** (p. 258)
  - The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)
  - Length Constraints: Fixed length of 64.
  - Pattern: `(0x)?[a-fA-F0-9]+`

**Request Body**

The request accepts the following data in JSON format.

- **rejectReason** (p. 258)
  - The reason the certificate transfer was rejected.
  - Type: String
  - Length Constraints: Maximum length of 128.
  - Required: No

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.
Errors

**InternalFailureException**
An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**
The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**
The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**
The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**
The rate exceeds the limit.

HTTP Status Code: 429

**TransferAlreadyCompletedException**
You can't revert the certificate transfer because the transfer is already complete.

HTTP Status Code: 410

**UnauthorizedException**
You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RemoveThingFromThingGroup

Service: AWS IoT

Remove the specified thing from the specified group.

Request Syntax

PUT /thing-groups/removeThingFromThingGroup HTTP/1.1
Content-type: application/json

{
  "thingArn": "string",
  "thingGroupArn": "string",
  "thingGroupName": "string",
  "thingName": "string"
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

tingArn (p. 260)

The ARN of the thing to remove from the group.

Type: String

Required: No

tingGroupArn (p. 260)

The group ARN.

Type: String

Required: No

tingGroupName (p. 260)

The group name.

Type: String


Pattern: [a-zA-Z0-9:]?

Required: No

tingName (p. 260)

The name of the thing to remove from the group.

Type: String

Pattern: [a-zA-Z0-9:_-]+  
Required: No  

Response Syntax  

HTTP/1.1 200  

Response Elements  

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

Errors  

InternalFailureException  
An unexpected error has occurred.  
HTTP Status Code: 500  

InvalidRequestException  
The request is not valid.  
HTTP Status Code: 400  

ResourceNotFoundException  
The specified resource does not exist.  
HTTP Status Code: 404  

ThrottlingException  
The rate exceeds the limit.  
HTTP Status Code: 429  

See Also  

For more information about using this API in one of the language-specific AWS SDKs, see the following:  
- AWS Command Line Interface  
- AWS SDK for .NET  
- AWS SDK for C++  
- AWS SDK for Go  
- AWS SDK for Java  
- AWS SDK for JavaScript  
- AWS SDK for PHP V3  
- AWS SDK for Python  
- AWS SDK for Ruby V2
ReplaceTopicRule

Service: AWS IoT

Replaces the rule. You must specify all parameters for the new rule. Creating rules is an administrator-level action. Any user who has permission to create rules will be able to access data processed by the rule.

Request Syntax

PATCH /rules/ruleName HTTP/1.1
Content-type: application/json

{  "topicRulePayload": {  "actions": [  {    "cloudwatchAlarm": {  "alarmName": "string",  "roleArn": "string",  "stateReason": "string",  "stateValue": "string" }},  "cloudwatchMetric": {  "metricName": "string",  "metricNamespace": "string",  "metricTimestamp": "string",  "metricUnit": "string",  "metricValue": "string",  "roleArn": "string" }},  "dynamoDB": {  "hashKeyField": "string",  "hashKeyType": "string",  "hashKeyValue": "string",  "operation": "string",  "payloadField": "string",  "rangeKeyField": "string",  "rangeKeyType": "string",  "rangeKeyValue": "string",  "roleArn": "string",  "tableName": "string" }},  "dynamoDBv2": {  "putItem": {  "tableName": "string" }},  "roleArn": "string" },  "elasticsearch": {  "endpoint": "string",  "id": "string",  "index": "string",  "roleArn": "string",  "type": "string" },  "firehose": {  "deliveryStreamName": "string",  "roleArn": "string",  "separator": "string" },  "iotAnalytics": {  "channelArn": "string",  "channelName": "string"},
"roleArn": "string"
},
"kinesis": {
  "partitionKey": "string",
  "roleArn": "string",
  "streamName": "string"
},
"lambda": {
  "functionArn": "string"
},
"republish": {
  "roleArn": "string",
  "topic": "string"
},
"s3": {
  "bucketName": "string",
  "cannedAcl": "string",
  "key": "string",
  "roleArn": "string"
},
"salesforce": {
  "token": "string",
  "url": "string"
},
"sns": {
  "messageFormat": "string",
  "roleArn": "string",
  "targetArn": "string"
},
"sqs": {
  "queueUrl": "string",
  "roleArn": "string",
  "useBase64": boolean
},
"awsIoTSqlVersion": "string",
"description": "string",
"errorAction": {
  "cloudwatchAlarm": {
    "alarmName": "string",
    "roleArn": "string",
    "stateReason": "string",
    "stateValue": "string"
  },
  "cloudwatchMetric": {
    ".metricName": "string",
    "metricNamespace": "string",
    "metricTimestamp": "string",
    "metricUnit": "string",
    "metricValue": "string",
    "roleArn": "string"
  },
  "dynamoDB": {
    "hashKeyField": "string",
    "hashKeyType": "string",
    "hashKeyValue": "string",
    "operation": "string",
    "payloadField": "string",
    "rangeKeyField": "string",
    "rangeKeyType": "string",
    "rangeKeyValue": "string",
    "roleArn": "string",
    "tableName": "string"
  },
  "dynamoDBv2": {
    "hashKeyField": "string",
    "hashKeyType": "string",
    "hashKeyValue": "string",
    "operation": "string",
    "payloadField": "string",
    "rangeKeyField": "string",
    "rangeKeyType": "string",
    "rangeKeyValue": "string",
    "roleArn": "string",
    "tableName": "string"
  }
}
"putItem": {
  "tableName": "string"
},
"roleArn": "string"
},
"elasticsearch": {
  "endpoint": "string",
  "id": "string",
  "index": "string",
  "roleArn": "string",
  "type": "string"
},
"firehose": {
  "deliveryStreamName": "string",
  "roleArn": "string",
  "separator": "string"
},
"iotAnalytics": {
  "channelArn": "string",
  "channelName": "string",
  "roleArn": "string"
},
"kinesis": {
  "partitionKey": "string",
  "roleArn": "string",
  "streamName": "string"
},
"lambda": {
  "functionArn": "string"
},
"republish": {
  "roleArn": "string",
  "topic": "string"
},
"s3": {
  "bucketName": "string",
  "cannedAcl": "string",
  "key": "string",
  "roleArn": "string"
},
"salesforce": {
  "token": "string",
  "url": "string"
},
"sns": {
  "messageFormat": "string",
  "roleArn": "string",
  "targetArn": "string"
},
"sqs": {
  "queueUrl": "string",
  "roleArn": "string",
  "useBase64": boolean
},
"ruleDisabled": boolean,
"sql": "string"}
**ruleName (p. 262)**

The name of the rule.


Pattern: `^[a-zA-Z0-9_]+$`

**Request Body**

The request accepts the following data in JSON format.

**topicRulePayload (p. 262)**

The rule payload.

Type: `TopicRulePayload (p. 444)` object

Required: Yes

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

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

**Errors**

- **InternalException**
  
  An unexpected error has occurred.

  HTTP Status Code: 500

- **InvalidRequestException**

  The request is not valid.

  HTTP Status Code: 400

- **ServiceUnavailableException**

  The service is temporarily unavailable.

  HTTP Status Code: 503

- **SqlParseException**

  The Rule-SQL expression can't be parsed correctly.

  HTTP Status Code: 400

- **UnauthorizedException**

  You are not authorized to perform this operation.

  HTTP Status Code: 401
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
SearchIndex
Service: AWS IoT
The query search index.

Request Syntax

POST /indices/search HTTP/1.1
Content-type: application/json

{
  "indexName": "string",
  "maxResults": number,
  "nextToken": "string",
  "queryString": "string",
  "queryVersion": "string"
}

URI Request Parameters
The request does not use any URI parameters.

Request Body
The request accepts the following data in JSON format.

indexName (p. 267)
The search index name.
Type: String
Pattern: [a-zA-Z0-9:_-]+
Required: No

maxResults (p. 267)
The maximum number of results to return at one time.
Type: Integer
Required: No

nextToken (p. 267)
The token used to get the next set of results, or null if there are no additional results.
Type: String
Required: No

queryString (p. 267)
The search query string.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 1000.
Required: Yes

queryVersion (p. 267)
The query version.
Type: String
Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

```json
{
  "nextToken": "string",
  "things": [
    {
      "attributes": {
        "string": "string"
      },
      "shadow": "string",
      "thingGroupNames": ["string"],
      "thingId": "string",
      "thingName": "string",
      "thingTypeName": "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 (p. 268)
The token used to get the next set of results, or null if there are no additional results.
Type: String

things (p. 268)
The things that match the search query.
Type: Array of ThingDocument (p. 433) objects

Errors

IndexNotReadyException
The index is not ready.
HTTP Status Code: 400
**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidQueryException**

The query is invalid.

HTTP Status Code: 400

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
SetDefaultAuthorizer

Sets the default authorizer. This will be used if a websocket connection is made without specifying an authorizer.

Request Syntax

```
POST /default-authorizer HTTP/1.1
Content-type: application/json

{
    "authorizerName": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

authorizerName (p. 270)

The authorizer name.

Type: String


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

Required: Yes

Response Syntax

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

{
    "authorizerArn": "string",
    "authorizerName": "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.

authorizerArn (p. 270)

The authorizer ARN.

Type: String
authorizerName (p. 270)
The authorizer name.
Type: String
Pattern: [\w=,@-]+

Errors
InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500
InvalidRequestException
The request is not valid.
HTTP Status Code: 400
ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404
ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503
ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429
UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V2
SetDefaultPolicyVersion
Service: AWS IoT

Sets the specified version of the specified policy as the policy's default (operative) version. This action affects all certificates to which the policy is attached. To list the principals the policy is attached to, use the ListPrincipalPolicy API.

Request Syntax

```
PATCH /policies/policyName/version/policyVersionId HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**policyName (p. 273)**

The policy name.


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

**policyVersionId (p. 273)**

The policy version ID.

Pattern: [0-9]+

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400
ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
SetLoggingOptions

Service: AWS IoT

Sets the logging options.

Request Syntax

POST /loggingOptions HTTP/1.1
Content-type: application/json

{
   "loggingOptionsPayload": {
      "logLevel": "string",
      "roleArn": "string"
   }
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

loggingOptionsPayload (p. 275)

   The logging options payload.

   Type: LoggingOptionsPayload (p. 403) object

   Required: Yes

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalException

   An unexpected error has occurred.

   HTTP Status Code: 500

InvalidRequestException

   The request is not valid.

   HTTP Status Code: 400
ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
SetV2LoggingLevel
Service: AWS IoT
Sets the logging level.

Request Syntax

```json
POST /v2LoggingLevel HTTP/1.1
Content-type: application/json

{
  "logLevel": "string",
  "logTarget": {
    "targetName": "string",
    "targetType": "string"
  }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**logLevel (p. 277)**

The log level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

Required: Yes

**logTarget (p. 277)**

The log target.

Type: LogTarget (p. 404) object

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

**InternalException**

An unexpected error has occurred.
HTTP Status Code: 500
InvalidRequestException
The request is not valid.

HTTP Status Code: 400
NotConfiguredException
The resource is not configured.

HTTP Status Code: 404
ServiceUnavailableException
The service is temporarily unavailable.

HTTP Status Code: 503

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
SetV2LoggingOptions

Service: AWS IoT

Sets the logging options for the V2 logging service.

Request Syntax

```plaintext
POST /v2LoggingOptions HTTP/1.1
Content-type: application/json
{
    "defaultLogLevel": "string",
    "disableAllLogs": boolean,
    "roleArn": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

defaultLogLevel (p. 279)

The default logging level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

Required: No

disableAllLogs (p. 279)

Set to true to disable all logs, otherwise set to false.

Type: Boolean

Required: No

roleArn (p. 279)

The role ARN that allows IoT to write to Cloudwatch logs.

Type: String

Required: No

Response Syntax

```plaintext
HTTP/1.1 200
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.
Errors

**InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
StartThingRegistrationTask
Service: AWS IoT

Creates a bulk thing provisioning task.

Request Syntax

POST /thing-registration-tasks HTTP/1.1
Content-type: application/json

{  
  "inputFileBucket": "string",
  "inputFileKey": "string",
  "roleArn": "string",
  "templateBody": "string"
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

inputFileBucket (p. 281)

The S3 bucket that contains the input file.

Type: String


Pattern: [a-zA-Z0-9-.]+

Required: Yes

inputFileKey (p. 281)

The name of input file within the S3 bucket. This file contains a newline delimited JSON file. Each line contains the parameter values to provision one device (thing).

Type: String


Pattern: [a-zA-Z0-9!_.*'()-/]+

Required: Yes

roleArn (p. 281)

The IAM role ARN that grants permission the input file.

Type: String


Required: Yes
templateBody (p. 281)
The provisioning template.
Type: String
Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json
{
   "taskId": "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.

taskId (p. 282)
The bulk thing provisioning task ID.
Type: String
Length Constraints: Maximum length of 40.

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
AWS SDK for Java
AWS SDK for JavaScript
AWS SDK for PHP V3
AWS SDK for Python
AWS SDK for Ruby V2
StopThingRegistrationTask
Service: AWS IoT
Cancels a bulk thing provisioning task.

Request Syntax

```
PUT /thing-registration-tasks/taskId/cancel HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

taskId (p. 284)

- The bulk thing provisioning task ID.
- Length Constraints: Maximum length of 40.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

- **InternalFailureException**
  - An unexpected error has occurred.
  - HTTP Status Code: 500
- **InvalidRequestException**
  - The request is not valid.
  - HTTP Status Code: 400
- **ResourceNotFoundException**
  - The specified resource does not exist.
  - HTTP Status Code: 404
- **ThrottlingException**
  - The rate exceeds the limit.
  - HTTP Status Code: 429
UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
TestAuthorization

Service: AWS IoT

Test custom authorization.

Request Syntax

POST /test-authorization?clientId=clientId HTTP/1.1

```json
{
    "authInfos": [
        {
            "actionType": "string",
            "resources": [ "string" ]
        }
    ],
    "cognitoIdentityPoolId": "string",
    "policyNamesToAdd": [ "string" ],
    "policyNamesToSkip": [ "string" ],
    "principal": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**clientId (p. 286)**

The MQTT client ID.

Request Body

The request accepts the following data in JSON format.

**authInfos (p. 286)**

A list of authorization info objects. Simulating authorization will create a response for each authInfo object in the list.

Type: Array of AuthInfo (p. 354) objects

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: Yes

**cognitoIdentityPoolId (p. 286)**

The Cognito identity pool ID.

Type: String

Required: No

**policyNamesToAdd (p. 286)**

When testing custom authorization, the policies specified here are treated as if they are attached to the principal being authorized.

Type: Array of strings
Pattern: \[\w+=,.@-]+\nRequired: No

**policyNamesToSkip (p. 286)**

When testing custom authorization, the policies specified here are treated as if they are not attached to the principal being authorized.

Type: Array of strings
Pattern: \[\w+=,.@-]+\nRequired: No

**principal (p. 286)**

The principal.
Type: String
Required: No

**Response Syntax**

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

{  
    "authResults": [
        {  
            "allowed": {
                "policies": [
                    {  
                        "policyArn": "string",
                        "policyName": "string"
                    }
                ]
            },
            "authDecision": "string",
            "authInfo": {
                "actionType": "string",
                "resources": [ "string" ]
            }
        },
        "denied": {
            "explicitDeny": {
                "policies": [
                    {  
                        "policyArn": "string",
                        "policyName": "string"
                    }
                ]
            },
            "implicitDeny": {
                "policies": [
                    {  
                        "policyArn": "string",
                        "policyName": "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.

authResults (p. 287)

The authentication results.

Type: Array of AuthResult (p. 358) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

LimitExceedededException

The number of attached entities exceeds the limit.

HTTP Status Code: 410

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
TestInvokeAuthorizer
Service: AWS IoT
Invoke the specified custom authorizer for testing purposes.

Request Syntax

```
POST /authorizer/authorizerName/test HTTP/1.1
Content-type: application/json
{
  "token": "string",
  "tokenSignature": "string"
}
```

URI Request Parameters
The request requires the following URI parameters.

`authorizerName (p. 290)`
The custom authorizer name.
Pattern: `[\w=,@-]+`

Request Body
The request accepts the following data in JSON format.

`token (p. 290)`
The token returned by your custom authentication service.
Type: String
Required: Yes

`tokenSignature (p. 290)`
The signature made with the token and your custom authentication service's private key.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 2560.
Pattern: `[A-Za-z0-9+/]{0,2}`
Required: Yes

Response Syntax

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

{
    "disconnectAfterInSeconds": number,
    "isAuthenticated": boolean,
    "policyDocuments": [ "string" ],
    "principalId": "string",
    "refreshAfterInSeconds": number
}

**Response Elements**

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

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

**disconnectAfterInSeconds (p. 290)**

The number of seconds after which the connection is terminated.

Type: Integer

**isAuthenticated (p. 290)**

True if the token is authenticated, otherwise false.

Type: Boolean

**policyDocuments (p. 290)**

IAM policy documents.

Type: Array of strings

**principalId (p. 290)**

The principal ID.

Type: String


Pattern: [a-zA-Z0-9]+

**refreshAfterInSeconds (p. 290)**

The number of seconds after which the temporary credentials are refreshed.

Type: Integer

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400
InvalidResponseException

The response is invalid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
TransferCertificate
Service: AWS IoT

Transfers the specified certificate to the specified AWS account.
You can cancel the transfer until it is acknowledged by the recipient.
No notification is sent to the transfer destination's account. It is up to the caller to notify the transfer target.
The certificate being transferred must not be in the ACTIVE state. You can use the UpdateCertificate API to deactivate it.
The certificate must not have any policies attached to it. You can use the DetachPrincipalPolicy API to detach them.

Request Syntax

```
PATCH /transfer-certificate/certificateId?targetAwsAccount=targetAwsAccount HTTP/1.1
Content-type: application/json

{
  "transferMessage": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**certificateId (p. 293)**

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)
Length Constraints: Fixed length of 64.
Pattern: (0x)?[a-fA-F0-9]+

**targetAwsAccount (p. 293)**

The AWS account.
Pattern: [0-9]{12}

Request Body

The request accepts the following data in JSON format.

**transferMessage (p. 293)**

The transfer message.
Type: String
Length Constraints: Maximum length of 128.
Required: No
Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "transferredCertificateArn": "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.

transferredCertificateArn (p. 294)

  The ARN of the certificate.

  Type: String

Errors

CertificateStateException

  The certificate operation is not allowed.

  HTTP Status Code: 406

InternalFailureException

  An unexpected error has occurred.

  HTTP Status Code: 500

InvalidRequestException

  The request is not valid.

  HTTP Status Code: 400

ResourceNotFoundException

  The specified resource does not exist.

  HTTP Status Code: 404

ServiceUnavailableException

  The service is temporarily unavailable.

  HTTP Status Code: 503

ThrottlingException

  The rate exceeds the limit.

  HTTP Status Code: 429

TransferConflictException

  You can't transfer the certificate because authorization policies are still attached.
HTTP Status Code: 409

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

### 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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateAuthorizer
Service: AWS IoT

Updates an authorizer.

Request Syntax

```
PUT /authorizer/authorizerName HTTP/1.1
Content-type: application/json

{
  "authorizerFunctionArn": "string",
  "status": "string",
  "tokenKeyName": "string",
  "tokenSigningPublicKeys": {
    "string": "string"
  }
}
```

URI Request Parameters
The request requires the following URI parameters.

**authorizerName (p. 296)**

The authorizer name.


Pattern: [\w=,@-]+

Request Body
The request accepts the following data in JSON format.

**authorizerFunctionArn (p. 296)**

The ARN of the authorizer's Lambda function.

Type: String

Required: No

**status (p. 296)**

The status of the update authorizer request.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

**tokenKeyName (p. 296)**

The key used to extract the token from the HTTP headers.

Type: String

Pattern: [a-zA-Z0-9-\_\-]+

Required: No

tokenSigningPublicKeys (p. 296)

The public keys used to verify the token signature.

Type: String to string map

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

Key Pattern: [a-zA-Z0-9:\_\-]+

Value Length Constraints: Maximum length of 5120.

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "authorizerArn": "string",
  "authorizerName": "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.

authorizerArn (p. 297)

The authorizer ARN.

Type: String

authorizerName (p. 297)

The authorizer name.

Type: String


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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500
InvalidRequestException
The request is not valid.
HTTP Status Code: 400

LimitExceededException
The number of attached entities exceeds the limit.
HTTP Status Code: 410

ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.
HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateCACertificate
Service: AWS IoT

Updates a registered CA certificate.

Request Syntax

```plaintext
PUT /cacertificate/caCertificateId?newAutoRegistrationStatus=newAutoRegistrationStatus&newStatus=newStatus HTTP/1.1
Content-type: application/json

{
    "registrationConfig": {
        "roleArn": "string",
        "templateBody": "string"
    },
    "removeAutoRegistration": boolean
}
```

URL Request Parameters

The request requires the following URI parameters.

certificateId (p. 299)
The CA certificate identifier.

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+

newAutoRegistrationStatus (p. 299)
The new value for the auto registration status. Valid values are: "ENABLE" or "DISABLE".

Valid Values: ENABLE | DISABLE

newStatus (p. 299)
The updated status of the CA certificate.

Note: The status value REGISTER_INACTIVE is deprecated and should not be used.

Valid Values: ACTIVE | INACTIVE

Request Body

The request accepts the following data in JSON format.

registrationConfig (p. 299)
Information about the registration configuration.

Type: RegistrationConfig (p. 417) object

Required: No

removeAutoRegistration (p. 299)
If true, remove auto registration.
Type: Boolean

Required: No

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

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

**Errors**

- **InternalFailureException**
  
  An unexpected error has occurred.
  
  HTTP Status Code: 500

- **InvalidRequestException**
  
  The request is not valid.
  
  HTTP Status Code: 400

- **ResourceNotFoundException**
  
  The specified resource does not exist.
  
  HTTP Status Code: 404

- **ServiceUnavailableException**
  
  The service is temporarily unavailable.
  
  HTTP Status Code: 503

- **ThrottlingException**
  
  The rate exceeds the limit.
  
  HTTP Status Code: 429

- **UnauthorizedException**
  
  You are not authorized to perform this operation.
  
  HTTP Status Code: 401

**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
- AWS SDK for Java
AWS IoT API Reference
UpdateCACertificate

- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateCertificate
Service: AWS IoT

Updates the status of the specified certificate. This operation is idempotent.

Moving a certificate from the ACTIVE state (including REVOKED) will not disconnect currently connected devices, but these devices will be unable to reconnect.

The ACTIVE state is required to authenticate devices connecting to AWS IoT using a certificate.

Request Syntax

```
PUT /certificates/certificateId?newStatus=newStatus HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

certificateId (p. 302)

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

Length Constraints: Fixed length of 64.

Pattern: \(0x)?[a-fA-F0-9]+\)

newStatus (p. 302)

The new status.

Note: Setting the status to PENDING_TRANSFER will result in an exception being thrown. PENDING_TRANSFER is a status used internally by AWS IoT. It is not intended for developer use.

Note: The status value REGISTER_INACTIVE is deprecated and should not be used.

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING_TRANSFER | REGISTER_INACTIVE | PENDING_ACTIVATION

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

CertificateStateException

The certificate operation is not allowed.
HTTP Status Code: 406
**InternalFailureException**
An unexpected error has occurred.

HTTP Status Code: 500
**InvalidRequestException**
The request is not valid.

HTTP Status Code: 400
**ResourceNotFoundException**
The specified resource does not exist.

HTTP Status Code: 404
**ServiceUnavailableException**
The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**
The rate exceeds the limit.

HTTP Status Code: 429
**UnauthorizedException**
You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateEventConfigurations
Service: AWS IoT

Updates the event configurations.

Request Syntax

PATCH /event-configurations HTTP/1.1
Content-type: application/json

{
   "eventConfigurations": {
      "string": {
         "Enabled": boolean
      }
   }
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**eventConfigurations (p. 304)**

The new event configuration values.
Type: String to Configuration (p. 371) object map

Valid Keys: THING | THING_GROUP | THING_TYPE | THING_GROUP_MEMBERSHIP | THING_GROUP_HIERARCHY | THING_TYPE_ASSOCIATION | JOB | JOB_EXECUTION

Required: No

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.
HTTP Status Code: 400

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateIndexingConfiguration
Service: AWS IoT
Updates the search configuration.

Request Syntax

```
POST /indexing/config HTTP/1.1
Content-type: application/json

{
    "thingIndexingConfiguration": {
        "thingIndexingMode": "string"
    }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

thingIndexingConfiguration (p. 306)

- Thing indexing configuration.
- Type: ThingIndexingConfiguration (p. 437) object
- Required: No

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

- InternalFailureException
  - An unexpected error has occurred.
  - HTTP Status Code: 500

- InvalidRequestException
  - The request is not valid.
  - HTTP Status Code: 400

- ServiceUnavailableException
  - The service is temporarily unavailable.
HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateRoleAlias

Service: AWS IoT

Updates a role alias.

Request Syntax

```
PUT /role-aliases/roleAlias HTTP/1.1
Content-type: application/json

{
  "credentialDurationSeconds": number,
  "roleArn": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**roleAlias (p. 308)**

The role alias to update.


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

Request Body

The request accepts the following data in JSON format.

**credentialDurationSeconds (p. 308)**

The number of seconds the credential will be valid.

Type: Integer


Required: No

**roleArn (p. 308)**

The role ARN.

Type: String


Required: No

Response Syntax

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

```json
{
    "roleAlias": "string",
    "roleAliasArn": "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.

**roleAlias (p. 308)**

The role alias.

Type: String


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

**roleAliasArn (p. 308)**

The role alias ARN.

Type: String

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
**UpdateStream**

Service: AWS IoT

Updates an existing stream. The stream version will be incremented by one.

**Request Syntax**

```plaintext
PUT /streams/streamId HTTP/1.1
Content-type: application/json

{
  "description": "string",
  "files": [
    {
      "fileId": number,
      "s3Location": {
        "bucket": "string",
        "key": "string",
        "version": "string"
      }
    }
  ],
  "roleArn": "string"
}
```

**URI Request Parameters**

The request requires the following URI parameters.

- **streamId** (p. 311)
  - The stream ID.
  - Pattern: [a-zA-Z0-9_\-]+

**Request Body**

The request accepts the following data in JSON format.

- **description** (p. 311)
  - The description of the stream.
  - Type: String
  - Length Constraints: Maximum length of 2028.
  - Pattern: [^\p{C}]+
  - Required: No

- **files** (p. 311)
  - The files associated with the stream.
  - Type: Array of StreamFile (p. 427) objects
Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: No

**roleArn (p. 311)**

An IAM role that allows the IoT service principal assumes to access your S3 files.

Type: String


Required: No

### Response Syntax

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

{
  "description": "string",
  "streamArn": "string",
  "streamId": "string",
  "streamVersion": number
}
```

### Response Elements

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

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

**description (p. 312)**

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{C}]`+

**streamArn (p. 312)**

The stream ARN.

Type: String

**streamId (p. 312)**

The stream ID.

Type: String


Pattern: `^[a-zA-Z0-9_-]+$`

**streamVersion (p. 312)**

The stream version.

Type: Integer
Valid Range: Minimum value of 0. Maximum value of 65535.

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateThing
Service: AWS IoT

Updates the data for a thing.

Request Syntax

PATCH /things/thingName HTTP/1.1
Content-type: application/json

{
  "attributePayload": {
    "attributes": {
      "string": "string"
    },
    "merge": boolean
  },
  "expectedVersion": number,
  "removeThingType": boolean,
  "thingTypeName": "string"
}

URI Request Parameters

The request requires the following URI parameters.

thingName (p. 314)

The name of the thing to update.
Pattern: [a-zA-Z0-9:_-]+

Request Body

The request accepts the following data in JSON format.

attributePayload (p. 314)

A list of thing attributes, a JSON string containing name-value pairs. For example:

{"attributes":{"name1":"value2"}}

This data is used to add new attributes or update existing attributes.
Type: AttributePayload (p. 353) object
Required: No

expectedVersion (p. 314)

The expected version of the thing record in the registry. If the version of the record in the registry does not match the expected version specified in the request, the UpdateThing request is rejected with a VersionConflictException.
Type: Long
Required: No
removeThingType (p. 314)

Remove a thing type association. If true, the association is removed.

Type: Boolean
Required: No

thingTypeName (p. 314)

The name of the thing type.

Type: String
Pattern: [a-zA-Z0-9:_-]+
Required: No

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.
HTTP Status Code: 401

**VersionConflictException**

An exception thrown when the version of a thing passed to a command is different than the version specified with the --version parameter.

HTTP Status Code: 409

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateThingGroup

Service: AWS IoT

Update a thing group.

Request Syntax

```
PATCH /thing-groups/thingGroupName HTTP/1.1
Content-type: application/json
{
  "expectedVersion": number,
  "thingGroupProperties": {
    "attributePayload": {
      "attributes": {
        "string": "string"
      },
      "merge": boolean
    },
    "thingGroupDescription": "string"
  }
}
```

URI Request Parameters

The request requires the following URI parameters.

thingGroupName (p. 317)

The thing group to update.


Pattern: [a-zA-Z0-9_:\-]+

Request Body

The request accepts the following data in JSON format.

expectedVersion (p. 317)

The expected version of the thing group. If this does not match the version of the thing group being updated, the update will fail.

Type: Long

Required: No

thingGroupProperties (p. 317)

The thing group properties.

Type: ThingGroupProperties (p. 436) object

Required: Yes

Response Syntax

```
HTTP/1.1 200
```
Content-type: application/json
{
    "version": number
}

Response Elements

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

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

version (p. 317)

    The version of the updated thing group.
    Type: Long

Errors

InternalFailureException

    An unexpected error has occurred.
    HTTP Status Code: 500

InvalidRequestException

    The request is not valid.
    HTTP Status Code: 400

ResourceNotFoundException

    The specified resource does not exist.
    HTTP Status Code: 404

ThrottlingException

    The rate exceeds the limit.
    HTTP Status Code: 429

VersionConflictException

    An exception thrown when the version of a thing passed to a command is different than the version specified with the --version parameter.
    HTTP Status Code: 409

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
AWS SDK for Java
AWS SDK for JavaScript
AWS SDK for PHP V3
AWS SDK for Python
AWS SDK for Ruby V2
UpdateThingGroupsForThing

Service: AWS IoT

Updates the groups to which the thing belongs.

Request Syntax

```
PUT /thing-groups/updateThingGroupsForThing HTTP/1.1
Content-type: application/json

{
  "thingGroupsToAdd": [ "string" ],
  "thingGroupsToRemove": [ "string" ],
  "thingName": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

thingGroupsToAdd (p. 320)

The groups to which the thing will be added.

Type: Array of strings


Pattern: [a-zA-Z0-9:_-]+

Required: No

thingGroupsToRemove (p. 320)

The groups from which the thing will be removed.

Type: Array of strings


Pattern: [a-zA-Z0-9:_-]+

Required: No

thingName (p. 320)

The thing whose group memberships will be updated.

Type: String


Pattern: [a-zA-Z0-9:_-]+

Required: No
Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

AWS IoT Data Plane

The following actions are supported by AWS IoT Data Plane:

- DeleteThingShadow (p. 323)
- GetThingShadow (p. 325)
- Publish (p. 327)
- UpdateThingShadow (p. 329)
DeleteThingShadow
Service: AWS IoT Data Plane

Deletes the shadow for the specified thing.

For more information, see DeleteThingShadow in the AWS IoT Developer Guide.

Request Syntax

DELETE /things/thingName/shadow HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

thingName (p. 323)
The name of the thing.
Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
payload

Response Elements

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

The response returns the following as the HTTP body.

payload (p. 323)
The state information, in JSON format.

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400

**MethodNotAllowedException**

The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**UnsupportedDocumentEncodingException**

The document encoding is not supported.

HTTP Status Code: 415

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetThingShadow
Service: AWS IoT Data Plane

Gets the shadow for the specified thing.

For more information, see GetThingShadow in the AWS IoT Developer Guide.

Request Syntax
GET /things/thingName/shadow HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.

thingName (p. 325)
The name of the thing.
Pattern: [a-zA-Z0-9:_-]+

Request Body
The request does not have a request body.

Response Syntax
HTTP/1.1 200
payload

Response Elements
If the action is successful, the service sends back an HTTP 200 response.
The response returns the following as the HTTP body.
payload (p. 325)
The state information, in JSON format.

Errors
InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException
The request is not valid.
HTTP Status Code: 400
**MethodNotAllowedException**
The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405
**ResourceNotFoundException**
The specified resource does not exist.

HTTP Status Code: 404
**ServiceUnavailableException**
The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**
The rate exceeds the limit.

HTTP Status Code: 429
**UnauthorizedException**
You are not authorized to perform this operation.

HTTP Status Code: 401
**UnsupportedDocumentEncodingException**
The document encoding is not supported.

HTTP Status Code: 415

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
Publish
Service: AWS IoT Data Plane
Publishes state information.
For more information, see HTTP Protocol in the AWS IoT Developer Guide.

Request Syntax

```plaintext
POST /topics/topic?qos=qos HTTP/1.1
payload
```

URI Request Parameters

The request requires the following URI parameters.

- **qos (p. 327)**
  - The Quality of Service (QoS) level.
  - Valid Range: Minimum value of 0. Maximum value of 1.
- **topic (p. 327)**
  - The name of the MQTT topic.

Request Body

The request accepts the following binary data.

- **payload (p. 327)**
  - The state information, in JSON format.

Response Syntax

```plaintext
HTTP/1.1 200
```

Response Elements

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

Errors

- **InternalFailureException**
  - An unexpected error has occurred.
  - HTTP Status Code: 500
- **InvalidRequestException**
  - The request is not valid.
HTTP Status Code: 400

**MethodNotAllowedException**

The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
**UpdateThingShadow**

Service: AWS IoT Data Plane

Updates the shadow for the specified thing.

For more information, see UpdateThingShadow in the AWS IoT Developer Guide.

**Request Syntax**

```
POST /things/thingName/shadow HTTP/1.1
payload
```

**URI Request Parameters**

The request requires the following URI parameters.

- **thingName (p. 329)**
  
  The name of the thing.
  
  
  Pattern: `[a-zA-Z0-9:_-]+`

**Request Body**

The request accepts the following binary data.

- **payload (p. 329)**
  
  The state information, in JSON format.

**Response Syntax**

```
HTTP/1.1 200
payload
```

**Response Elements**

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

The response returns the following as the HTTP body.

- **payload (p. 329)**
  
  The state information, in JSON format.

**Errors**

- **ConflictException**
  
  The specified version does not match the version of the document.
HTTP Status Code: 409
**InternalFailureException**
An unexpected error has occurred.

HTTP Status Code: 500
**InvalidRequestException**
The request is not valid.

HTTP Status Code: 400
**MethodNotAllowedException**
The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405
**RequestEntityTooLargeException**
The payload exceeds the maximum size allowed.

HTTP Status Code: 413
**ServiceUnavailableException**
The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**
The rate exceeds the limit.

HTTP Status Code: 429
**UnauthorizedException**
You are not authorized to perform this operation.

HTTP Status Code: 401
**UnsupportedDocumentEncodingException**
The document encoding is not supported.

HTTP Status Code: 415

**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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
The following actions are supported by AWS IoT Jobs Data Plane:

- `DescribeJobExecution` (p. 332)
- `GetPendingJobExecutions` (p. 335)
- `StartNextPendingJobExecution` (p. 338)
- `UpdateJobExecution` (p. 341)
DescribeJobExecution

Service: AWS IoT Jobs Data Plane

Gets details of a job execution.

Request Syntax

```
GET /things/thingName/jobs/jobId?
executionNumber=executionNumber&includeJobDocument=includeJobDocument HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**executionNumber (p. 332)**

Optional. A number that identifies a particular job execution on a particular device. If not specified, the latest job execution is returned.

**includeJobDocument (p. 332)**

Optional. When set to true, the response contains the job document. The default is false.

**jobId (p. 332)**

The unique identifier assigned to this job when it was created.

Pattern: [a-zA-Z0-9-_.]+|^[\$_-]+$next

**thingName (p. 332)**

The thing name associated with the device the job execution is running on.


Pattern: [a-zA-Z0-9:._-]+

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
{
  "execution": {
    "executionNumber": number,
    "jobDocument": "string",
    "jobId": "string",
    "lastUpdatedAt": number,
    "queuedAt": number,
    "startedAt": number,
    "status": "string",
    "statusDetails": {
      "string" : "string"
    },
    "thingName": "string",
  }
}
```

332
"versionNumber": number
}
}

Response Elements

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

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

**execution (p. 332)**

Contains data about a job execution.

Type: JobExecution (p. 448) object

Errors

**CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

**InvalidRequestException**

The contents of the request were invalid. For example, this code is returned when an UpdateJobExecution request contains invalid status details. The message contains details about the error.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**TerminalStateException**

The job is in a terminal state.

HTTP Status Code: 410

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetPendingJobExecutions

Service: AWS IoT Jobs Data Plane

Gets the list of all jobs for a thing that are not in a terminal status.

Request Syntax

GET /things/thingName/jobs HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

**thingName (p. 335)**

The name of the thing that is executing the job.


Pattern: [a-zA-Z0-9:_-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

```
{
    "inProgressJobs": [
        {
            "executionNumber": number,
            "jobId": "string",
            "lastUpdatedAt": number,
            "queuedAt": number,
            "startedAt": number,
            "versionNumber": number
        }
    ],
    "queuedJobs": [
        {
            "executionNumber": number,
            "jobId": "string",
            "lastUpdatedAt": number,
            "queuedAt": number,
            "startedAt": number,
            "versionNumber": number
        }
    ]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.
The following data is returned in JSON format by the service.

**inProgressJobs (p. 335)**
A list of JobExecutionSummary objects with status IN_PROGRESS.
Type: Array of JobExecutionSummary (p. 451) objects

**queuedJobs (p. 335)**
A list of JobExecutionSummary objects with status QUEUED.
Type: Array of JobExecutionSummary (p. 451) objects

**Errors**

**CertificateValidationError**
The certificate is invalid.
HTTP Status Code: 400

**InvalidRequestException**
The contents of the request were invalid. For example, this code is returned when an UpdateJobExecution request contains invalid status details. The message contains details about the error.
HTTP Status Code: 400

**ResourceNotFoundException**
The specified resource does not exist.
HTTP Status Code: 404

**ServiceUnavailableException**
The service is temporarily unavailable.
HTTP Status Code: 503

**ThrottlingException**
The rate exceeds the limit.
HTTP Status Code: 429

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V2
StartNextPendingJobExecution

Service: AWS IoT Jobs Data Plane

Gets and starts the next pending (status IN_PROGRESS or QUEUED) job execution for a thing.

Request Syntax

```
PUT /things/thingName/jobs/$next HTTP/1.1
Content-type: application/json

{
  "statusDetails": {
    "string": "string"
  }
}
```

URI Request Parameters

The request requires the following URI parameters.

thingName (p. 338)

The name of the thing associated with the device.


Pattern: [a-zA-Z0-9:_-]+

Request Body

The request accepts the following data in JSON format.

statusDetails (p. 338)

A collection of name/value pairs that describe the status of the job execution. If not specified, the statusDetails are unchanged.

Type: String to string map

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

Key Pattern: [a-zA-Z0-9:_-]+


Value Pattern: [^\p{C}]++

Required: No

Response Syntax

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

{
```
"execution": {
   "executionNumber": number,
   "jobDocument": "string",
   "jobId": "string",
   "lastUpdatedAt": number,
   "queuedAt": number,
   "startedAt": number,
   "status": "string",
   "statusDetails": {
      "string" : "string"
   },
   "thingName": "string",
   "versionNumber": number
}

Response Elements

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

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

execution (p. 338)

A JobExecution object.

Type: JobExecution (p. 448) object

Errors

CertificateValidationException

The certificate is invalid.

HTTP Status Code: 400

InvalidRequestException

The contents of the request were invalid. For example, this code is returned when an UpdateJobExecution request contains invalid status details. The message contains details about the error.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429
See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateJobExecution

Service: AWS IoT Jobs Data Plane

Updates the status of a job execution.

Request Syntax

POST /things/thingName/jobs/jobId HTTP/1.1
Content-type: application/json

{
   "executionNumber": number,
   "expectedVersion": number,
   "includeJobDocument": boolean,
   "includeJobExecutionState": boolean,
   "status": "string",
   "statusDetails": {
      "string" : "string"
   }
}

URI Request Parameters

The request requires the following URI parameters.

jobId (p. 341)

The unique identifier assigned to this job when it was created.

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9_\-]+

ingName (p. 341)

The name of the thing associated with the device.


Pattern: [a-zA-Z0-9\-_]+

Request Body

The request accepts the following data in JSON format.

executionNumber (p. 341)

Optional. A number that identifies a particular job execution on a particular device.

Type: Long

Required: No

expectedVersion (p. 341)

Optional. The expected current version of the job execution. Each time you update the job execution, its version is incremented. If the version of the job execution stored in Jobs does not match, the update is rejected with a VersionMismatch error, and an ErrorResponse that contains the
current job execution status data is returned. (This makes it unnecessary to perform a separate DescribeJobExecution request in order to obtain the job execution status data.)

Type: Long

Required: No

includeJobDocument (p. 341)

Optional. When set to true, the response contains the job document. The default is false.

Type: Boolean

Required: No

includeJobExecutionState (p. 341)

Optional. When included and set to true, the response contains the JobExecutionState data. The default is false.

Type: Boolean

Required: No

status (p. 341)

The new status for the job execution (IN_PROGRESS, FAILED, SUCCESS, or REJECTED). This must be specified on every update.

Type: String

Valid Values: QUEUED | IN_PROGRESS | SUCCEEDED | FAILED | REJECTED | REMOVED | CANCELED

Required: Yes

statusDetails (p. 341)

Optional. A collection of name/value pairs that describe the status of the job execution. If not specified, the statusDetails are unchanged.

Type: String to string map

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

Key Pattern: \[(a-zA-Z0-9:__-]+\]


Value Pattern: \[\^\p{C}\]++

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "executionState": {
    "status": "string",
    "statusDetails": {

```
```
  "string" : "string"
},
  "versionNumber": number
},
  "jobDocument": "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.

**executionState (p. 342)**

A JobExecutionState object.

Type: JobExecutionState (p. 450) object

**jobDocument (p. 342)**

The contents of the Job Documents.

Type: String

Length Constraints: Maximum length of 32768.

Errors

**CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

**InvalidRequestException**

The contents of the request were invalid. For example, this code is returned when an UpdateJobExecution request contains invalid status details. The message contains details about the error.

HTTP Status Code: 400

**InvalidStateTransitionException**

An update attempted to change the job execution to a state that is invalid because of the job execution's current state (for example, an attempt to change a request in state SUCCESS to state IN_PROGRESS). In this case, the body of the error message also contains the executionState field.

HTTP Status Code: 409

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
Data Types

The following data types are supported by AWS IoT:

- Action (p. 349)
- Allowed (p. 352)
- AttributePayload (p. 353)
- AuthInfo (p. 354)
- AuthorizerDescription (p. 355)
- AuthorizerSummary (p. 357)
- AuthResult (p. 358)
- CACertificate (p. 359)
- CACertificateDescription (p. 360)
- Certificate (p. 362)
- CertificateDescription (p. 363)
- CloudwatchAlarmAction (p. 365)
- CloudwatchMetricAction (p. 366)
- CodeSigning (p. 368)
- CodeSigningCertificateChain (p. 369)
- CodeSigningSignature (p. 370)
- Configuration (p. 371)
- CustomCodeSigning (p. 372)
- Denied (p. 373)
- DynamoDBAction (p. 374)
- DynamoDBv2Action (p. 376)
- EffectivePolicy (p. 377)
- ElasticsearchAction (p. 378)
- ErrorInfo (p. 379)
- ExplicitDeny (p. 380)
- FirehoseAction (p. 381)
- GroupNameAndArn (p. 382)
- ImplicitDeny (p. 383)
- IotAnalyticsAction (p. 384)
- Job (p. 385)
- JobExecution (p. 388)
- JobExecutionsRolloutConfig (p. 390)
- JobExecutionStatusDetails (p. 391)
- JobExecutionSummary (p. 392)
- JobExecutionSummaryForJob (p. 394)
- JobExecutionSummaryForThing (p. 395)
- JobProcessDetails (p. 396)
- JobSummary (p. 398)
The following data types are supported by AWS IoT Data Plane:

The following data types are supported by AWS IoT Jobs Data Plane:
AWS IoT

The following data types are supported by AWS IoT:

- Action (p. 349)
- Allowed (p. 352)
- AttributePayload (p. 353)
- AuthInfo (p. 354)
- AuthorizerDescription (p. 355)
- AuthorizerSummary (p. 357)
- AuthResult (p. 358)
- CACertificate (p. 359)
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• ThingTypeProperties (p. 440)
• TopicRule (p. 441)
• TopicRuleListItem (p. 443)
• TopicRulePayload (p. 444)
• TransferData (p. 446)
Action
Service: AWS IoT

Describes the actions associated with a rule.

Contents

cloudwatchAlarm
Change the state of a CloudWatch alarm.
Type: CloudwatchAlarmAction (p. 365) object
Required: No

cloudwatchMetric
Capture a CloudWatch metric.
Type: CloudwatchMetricAction (p. 366) object
Required: No

dynamoDB
Write to a DynamoDB table.
Type: DynamoDBAction (p. 374) object
Required: No

dynamoDBv2
Write to a DynamoDB table. This is a new version of the DynamoDB action. It allows you to write each attribute in an MQTT message payload into a separate DynamoDB column.
Type: DynamoDBv2Action (p. 376) object
Required: No

elasticsearch
Write data to an Amazon Elasticsearch Service domain.
Type: ElasticsearchAction (p. 378) object
Required: No

firehose
Write to an Amazon Kinesis Firehose stream.
Type: FirehoseAction (p. 381) object
Required: No

iotAnalytics
Sends message data to an AWS IoT Analytics channel.
Type: iotAnalyticsAction (p. 384) object
Required: No
kinesis
   Write data to an Amazon Kinesis stream.
   Type: KinesisAction (p. 401) object
   Required: No

lambda
   Invoke a Lambda function.
   Type: LambdaAction (p. 402) object
   Required: No

republish
   Publish to another MQTT topic.
   Type: RepublishAction (p. 418) object
   Required: No

s3
   Write to an Amazon S3 bucket.
   Type: S3Action (p. 421) object
   Required: No

salesforce
   Send a message to a Salesforce IoT Cloud Input Stream.
   Type: SalesforceAction (p. 423) object
   Required: No

sns
   Publish to an Amazon SNS topic.
   Type: SnsAction (p. 424) object
   Required: No

sqs
   Publish to an Amazon SQS queue.
   Type: SqsAction (p. 425) object
   Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Allowed
Service: AWS IoT

Contains information that allowed the authorization.

Contents

policies

A list of policies that allowed the authentication.

Type: Array of Policy (p. 413) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AttributePayload
Service: AWS IoT
The attribute payload.

Contents

attributes
A JSON string containing up to three key-value pair in JSON format. For example:
{"attributes":{"string1":"string2"}}
Type: String to string map
Key Length Constraints: Maximum length of 128.
Key Pattern: [a-zA-Z0-9_.,@/:#-]+
Value Length Constraints: Maximum length of 800.
Value Pattern: [a-zA-Z0-9_.,@/:#-]*
Required: No

merge
Specifies whether the list of attributes provided in the AttributePayload is merged with the attributes stored in the registry, instead of overwriting them.
To remove an attribute, call UpdateThing with an empty attribute value.

Note
The merge attribute is only valid when calling UpdateThing.
Type: Boolean
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AuthInfo
Service: AWS IoT

A collection of authorization information.

Contents

actionType

The type of action for which the principal is being authorized.

Type: String

Valid Values: PUBLISH | SUBSCRIBE | RECEIVE | CONNECT

Required: No

resources

The resources for which the principal is being authorized to perform the specified action.

Type: Array of strings

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AuthorizeDescription
Service: AWS IoT
The authorizer description.

Contents

authorizerArn
The authorizer ARN.
Type: String
Required: No

authorizerFunctionArn
The authorizer's Lambda function ARN.
Type: String
Required: No

authorizerName
The authorizer name.
Type: String
Pattern: [\w=\@-]+
Required: No

creationDate
The UNIX timestamp of when the authorizer was created.
Type: Timestamp
Required: No

lastModifiedDate
The UNIX timestamp of when the authorizer was last updated.
Type: Timestamp
Required: No

status
The status of the authorizer.
Type: String
Valid Values: ACTIVE | INACTIVE
Required: No

tokenKeyName
The key used to extract the token from the HTTP headers.
AuthorizerDescription

Type: String
Pattern: [a-zA-Z0-9_\-\_]+
Required: No

tokenSigningPublicKeys

The public keys used to validate the token signature returned by your custom authentication service.

Type: String to string map
Key Length Constraints: Minimum length of 1. Maximum length of 128.
Key Pattern: [a-zA-Z0-9\-_]+
Value Length Constraints: Maximum length of 5120.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AuthorizerSummary
Service: AWS IoT

The authorizer summary.

Contents

authorizerArn

The authorizer ARN.
Type: String
Required: No

authorizerName

The authorizer name.
Type: String
Pattern: [\w=, @-]+
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AuthResult
Service: AWS IoT
The authorizer result.

Contents

allowed
The policies and statements that allowed the specified action.
Type: Allowed (p. 352) object
Required: No

authDecision
The final authorization decision of this scenario. Multiple statements are taken into account when determining the authorization decision. An explicit deny statement can override multiple allow statements.
Type: String
Valid Values: ALLOWED | EXPLICIT_DENY | IMPLICIT_DENY
Required: No

authInfo
Authorization information.
Type: AuthInfo (p. 354) object
Required: No

denied
The policies and statements that denied the specified action.
Type: Denied (p. 373) object
Required: No

missingContextValues
Contains any missing context values found while evaluating policy.
Type: Array of strings
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
CACertificate
Service: AWS IoT
A CA certificate.

Contents

certificateArn
The ARN of the CA certificate.
Type: String
Required: No

certificateId
The ID of the CA certificate.
Type: String
Length Constraints: Fixed length of 64.
Pattern: (0x)?[a-fA-F0-9]+
Required: No

creationDate
The date the CA certificate was created.
Type: Timestamp
Required: No

status
The status of the CA certificate.
The status value REGISTER_INACTIVE is deprecated and should not be used.
Type: String
Valid Values: ACTIVE | INACTIVE
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
**CACertificateDescription**

Service: AWS IoT

Describes a CA certificate.

**Contents**

- **autoRegistrationStatus**
  - Whether the CA certificate configured for auto registration of device certificates. Valid values are "ENABLE" and "DISABLE"
  - Type: String
  - Valid Values: ENABLE | DISABLE
  - Required: No

- **certificateArn**
  - The CA certificate ARN.
  - Type: String
  - Required: No

- **certificateId**
  - The CA certificate ID.
  - Type: String
  - Length Constraints: Fixed length of 64.
  - Pattern: (0x)?[a-fA-F0-9]+`
  - Required: No

- **certificatePem**
  - The CA certificate data, in PEM format.
  - Type: String
  - Required: No

- **creationDate**
  - The date the CA certificate was created.
  - Type: Timestamp
  - Required: No

- **ownedBy**
  - The owner of the CA certificate.
  - Type: String
  - Pattern: [0-9]{12}
**status**

The status of a CA certificate.

Type: String

Valid Values: ACTIVE | INACTIVE

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Certificate

Service: AWS IoT

Information about a certificate.

Contents

**certificateArn**

The ARN of the certificate.

Type: String

Required: No

**certificateId**

The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+  

Required: No

**creationDate**

The date and time the certificate was created.

Type: Timestamp

Required: No

**status**

The status of the certificate.

The status value REGISTER_INACTIVE is deprecated and should not be used.

Type: String

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING_TRANSFER | REGISTER_INACTIVE | PENDING_ACTIVATION

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
CertificateDescription

Service: AWS IoT

Describes a certificate.

Contents

cacertificateId

The certificate ID of the CA certificate used to sign this certificate.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+  

Required: No  

certificateArn

The ARN of the certificate.

Type: String

Required: No

certificateId

The ID of the certificate.

Type: String

Length Constraints: Fixed length of 64.

Pattern: (0x)?[a-fA-F0-9]+  

Required: No

certificatePem

The certificate data, in PEM format.

Type: String


Required: No

creationDate

The date and time the certificate was created.

Type: Timestamp

Required: No

lastModifiedDate

The date and time the certificate was last modified.

Type: Timestamp

Required: No
ownedBy

The ID of the AWS account that owns the certificate.

Type: String

Pattern: [0-9]{12}

Required: No

previousOwnedBy

The ID of the AWS account of the previous owner of the certificate.

Type: String

Pattern: [0-9]{12}

Required: No

status

The status of the certificate.

Type: String

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING_TRANSFER | REGISTER_INACTIVE | PENDING_ACTIVATION

Required: No

transferData

The transfer data.

Type: TransferData (p. 446) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
CloudwatchAlarmAction

Service: AWS IoT

Describes an action that updates a CloudWatch alarm.

Contents

alarmName

The CloudWatch alarm name.

Type: String

Required: Yes

roleArn

The IAM role that allows access to the CloudWatch alarm.

Type: String

Required: Yes

stateReason

The reason for the alarm change.

Type: String

Required: Yes

stateValue

The value of the alarm state. Acceptable values are: OK, ALARM, INSUFFICIENT_DATA.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
CloudwatchMetricAction

Service: AWS IoT

Describes an action that captures a CloudWatch metric.

Contents

**metricName**

The CloudWatch metric name.

Type: String

Required: Yes

**metricNamespace**

The CloudWatch metric namespace name.

Type: String

Required: Yes

**metricTimestamp**

An optional Unix timestamp.

Type: String

Required: No

**metricUnit**

The metric unit supported by CloudWatch.

Type: String

Required: Yes

**metricValue**

The CloudWatch metric value.

Type: String

Required: Yes

**roleArn**

The IAM role that allows access to the CloudWatch metric.

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 Go
- AWS SDK for Java
• AWS SDK for Ruby V2
CodeSigning
Service: AWS IoT

Describes the method to use when code signing a file.

Contents

awsSignerJobId

The ID of the AWSSignerJob which was created to sign the file.

Type: String

Required: No

customCodeSigning

A custom method for code signing a file.

Type: CustomCodeSigning (p. 372) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
CodeSigningCertificateChain
Service: AWS IoT

Describes the certificate chain being used when code signing a file.

Contents

certificateName
The name of the certificate.
Type: String
Required: No

inlineDocument
A base64 encoded binary representation of the code signing certificate chain.
Type: String
Required: No

stream
A stream of the certificate chain files.
Type: Stream (p. 426) object
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
CodeSigningSignature
Service: AWS IoT

Describes the signature for a file.

Contents

inlineDocument

A base64 encoded binary representation of the code signing signature.
Type: Base64-encoded binary data object
Required: No

stream

A stream of the code signing signature.
Type: Stream (p. 426) object
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Configuration
Service: AWS IoT

Contents

Enabled
True to enable the configuration.
Type: Boolean
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
CustomCodeSigning
Service: AWS IoT

Describes a custom method used to code sign a file.

Contents

certificateChain
The certificate chain.
Type: CodeSigningCertificateChain (p. 369) object
Required: No

hashAlgorithm
The hash algorithm used to code sign the file.
Type: String
Required: No

signature
The signature for the file.
Type: CodeSigningSignature (p. 370) object
Required: No

signatureAlgorithm
The signature algorithm used to code sign the file.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Denied
Service: AWS IoT

Contains information that denied the authorization.

Contents

explicitDeny

Information that explicitly denies the authorization.

Type: ExplicitDeny (p. 380) object

Required: No

implicitDeny

Information that implicitly denies the authorization. When a policy doesn't explicitly deny or allow an action on a resource it is considered an implicit deny.

Type: ImplicitDeny (p. 383) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
**DynamoDBAction**

Service: AWS IoT

Describes an action to write to a DynamoDB table.

The `tableName`, `hashKeyField`, and `rangeKeyField` values must match the values used when you created the table.

The `hashKeyValue` and `rangeKeyValue` fields use a substitution template syntax. These templates provide data at runtime. The syntax is as follows: `_${sql-expression}_`.

You can specify any valid expression in a WHERE or SELECT clause, including JSON properties, comparisons, calculations, and functions. For example, the following field uses the third level of the topic:

"hashKeyValue": "${topic(3)}"

The following field uses the timestamp:

"rangeKeyValue": "${timestamp()}

**Contents**

**hashKeyField**

The hash key name.

Type: String

Required: Yes

**hashKeyType**

The hash key type. Valid values are "STRING" or "NUMBER"

Type: String

Valid Values: STRING | NUMBER

Required: No

**hashKeyValue**

The hash key value.

Type: String

Required: Yes

**operation**

The type of operation to be performed. This follows the substitution template, so it can be `${operation}`, but the substitution must result in one of the following: INSERT, UPDATE, or DELETE.

Type: String

Required: No

**payloadField**

The action payload. This name can be customized.
Type: String
Required: No

rangeKeyField

The range key name.
Type: String
Required: No

rangeKeyType

The range key type. Valid values are "STRING" or "NUMBER"
Type: String
Valid Values: STRING | NUMBER
Required: No

rangeKeyValue

The range key value.
Type: String
Required: No

roleArn

The ARN of the IAM role that grants access to the DynamoDB table.
Type: String
Required: Yes

tableName

The name of the DynamoDB table.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
DynamoDBv2Action

Service: AWS IoT

Describes an action to write to a DynamoDB table.

This DynamoDB action writes each attribute in the message payload into its own column in the DynamoDB table.

Contents

putItem

Specifies the DynamoDB table to which the message data will be written. For example:

```
{ "dynamoDBv2": { "roleArn": "aws:iam:12341251:my-role" "putItem":
{ "tableName": "my-table" } } }
```

Each attribute in the message payload will be written to a separate column in the DynamoDB database.

Type: PutItemInput (p. 416) object

Required: No

roleArn

The ARN of the IAM role that grants access to the DynamoDB table.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
EffectivePolicy
Service: AWS IoT
The policy that has the effect on the authorization results.

Contents

policyArn
The policy ARN.
Type: String
Required: No

policyDocument
The IAM policy document.
Type: String
Required: No

policyName
The policy name.
Type: String
Pattern: [\w+=,.@-]+
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ElasticsearchAction

Service: AWS IoT

Describes an action that writes data to an Amazon Elasticsearch Service domain.

Contents

**endpoint**

The endpoint of your Elasticsearch domain.

Type: String

Pattern: `https://.*`

Required: Yes

**id**

The unique identifier for the document you are storing.

Type: String

Required: Yes

**index**

The Elasticsearch index where you want to store your data.

Type: String

Required: Yes

**roleArn**

The IAM role ARN that has access to Elasticsearch.

Type: String

Required: Yes

**type**

The type of document you are storing.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ErrorInfo
Service: AWS IoT

Error information.

Contents

code
The error code.
Type: String
Required: No

message
The error message.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ExplicitDeny
Service: AWS IoT

Information that explicitly denies authorization.

Contents

policies

The policies that denied the authorization.

Type: Array of Policy (p. 413) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
FirehoseAction

Service: AWS IoT

Describes an action that writes data to an Amazon Kinesis Firehose stream.

Contents

deliveryStreamName

The delivery stream name.

Type: String

Required: Yes

roleArn

The IAM role that grants access to the Amazon Kinesis Firehose stream.

Type: String

Required: Yes

separator

A character separator that will be used to separate records written to the Firehose stream. Valid values are: \n (newline), \t (tab), \n\n (Windows newline), , (comma).

Type: String

Pattern: (\n\t)|(\n)|,\n
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
GroupNameAndArn
Service: AWS IoT

The name and ARN of a group.

Contents

groupArn
The group ARN.
Type: String
Required: No

groupName
The group name.
Type: String

Pattern: [a-zA-Z0-9-:_.]+
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ImplicitDeny
Service: AWS IoT

Information that implicitly denies authorization. When policy doesn’t explicitly deny or allow an action on a resource it is considered an implicit deny.

Contents

policies

Policies that don’t contain a matching allow or deny statement for the specified action on the specified resource.

Type: Array of Policy (p. 413) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
IotAnalyticsAction
Service: AWS IoT

Sends message data to an AWS IoT Analytics channel.

Contents

channelArn

(deprecated) The ARN of the IoT Analytics channel to which message data will be sent.
Type: String
Required: No

channelName

The name of the IoT Analytics channel to which message data will be sent.
Type: String
Required: No

roleArn

The ARN of the role which has a policy that grants IoT Analytics permission to send message data via IoT Analytics (iotanalytics:BatchPutMessage).
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Job
Service: AWS IoT

The Job object contains details about a job.

Contents

comment
If the job was updated, describes the reason for the update.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: [^\p{C}]+
Required: No

completedAt
The time, in milliseconds since the epoch, when the job was completed.
Type: Timestamp
Required: No

createdAt
The time, in milliseconds since the epoch, when the job was created.
Type: Timestamp
Required: No

description
A short text description of the job.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: [^\p{C}]+
Required: No

documentParameters
The parameters specified for the job document.
Type: String to string map
Key Length Constraints: Minimum length of 1. Maximum length of 128.
Key Pattern: [a-zA-Z0-9-_:\-]+
Value Pattern: [^\p{C}]+
Required: No
**jobArn**

An ARN identifying the job with format "arn:aws:iot:region:account:job/jobId".

Type: String

Required: No

**jobExecutionsRolloutConfig**

Allows you to create a staged rollout of a job.

Type: `JobExecutionsRolloutConfig (p. 390)` object

Required: No

**jobId**

The unique identifier you assigned to this job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `[a-zA-Z0-9_\-]+`

Required: No

**jobProcessDetails**

Details about the job process.

Type: `JobProcessDetails (p. 396)` object

Required: No

**lastUpdatedAt**

The time, in milliseconds since the epoch, when the job was last updated.

Type: Timestamp

Required: No

**presignedUrlConfig**

Configuration for pre-signed S3 URLs.

Type: `PresignedUrlConfig (p. 415)` object

Required: No

**status**

The status of the job, one of IN_PROGRESS, CANCELED, or COMPLETED.

Type: String

Valid Values: IN_PROGRESS | CANCELED | COMPLETED

Required: No

**targets**

A list of IoT things and thing groups to which the job should be sent.

Type: Array of strings
Array Members: Minimum number of 1 item.

Required: No

**targetSelection**

Specifies whether the job will continue to run (CONTINUOUS), or will be complete after all those things specified as targets have completed the job (SNAPSHOT). If continuous, the job may also be run on a thing when a change is detected in a target. For example, a job will run on a device when the thing representing the device is added to a target group, even after the job was completed by all things originally in the group.

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
JobExecution
Service: AWS IoT

The job execution object represents the execution of a job on a particular device.

Contents

executionNumber

A string (consisting of the digits "0" through "9") which identifies this particular job execution on this particular device. It can be used in commands which return or update job execution information.

Type: Long

Required: No

jobId

The unique identifier you assigned to the job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9_\-]+

Required: No

lastUpdatedAt

The time, in milliseconds since the epoch, when the job execution was last updated.

Type: Timestamp

Required: No

queuedAt

The time, in milliseconds since the epoch, when the job execution was queued.

Type: Timestamp

Required: No

startedAt

The time, in milliseconds since the epoch, when the job execution started.

Type: Timestamp

Required: No

status

The status of the job execution (IN_PROGRESS, QUEUED, FAILED, SUCCESS, CANCELED, or REJECTED).

Type: String

Valid Values: QUEUED | IN_PROGRESS | SUCCEEDED | FAILED | REJECTED | REMOVED | CANCELED

Required: No
statusDetails
A collection of name/value pairs that describe the status of the job execution.
Type: JobExecutionStatusDetails (p. 391) object
Required: No

thingArn
The ARN of the thing on which the job execution is running.
Type: String
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
JobExecutionsRolloutConfig

Contents

maximumPerMinute

The maximum number of things that will be notified of a pending job, per minute. This parameter allows you to create a staged rollout.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
JobExecutionStatusDetails
Service: AWS IoT
Details of the job execution status.

Contents

detailsMap
The job execution status.
Type: String to string map
Key Length Constraints: Minimum length of 1. Maximum length of 128.
Key Pattern: [a-zA-Z0-9-_]+
Value Pattern: [^\p{C}]*
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
JobExecutionSummary
Service: AWS IoT

The job execution summary.

Contents

executionNumber

A string (consisting of the digits "0" through "9") which identifies this particular job execution on this particular device. It can be used later in commands which return or update job execution information.

Type: Long
Required: No

lastUpdatedAt

The time, in milliseconds since the epoch, when the job execution was last updated.

Type: Timestamp
Required: No

queuedAt

The time, in milliseconds since the epoch, when the job execution was queued.

Type: Timestamp
Required: No

startedAt

The time, in milliseconds since the epoch, when the job execution started.

Type: Timestamp
Required: No

status

The status of the job execution.

Type: String
Valid Values: QUEUED | IN_PROGRESS | SUCCEEDED | FAILED | REJECTED | REMOVED | CANCELED
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
JobExecutionSummaryForJob
Service: AWS IoT

Contains a summary of information about job executions for a specific job.

Contents

jobExecutionSummary
- Contains a subset of information about a job execution.
  - Type: JobExecutionSummary (p. 392) object
  - Required: No

thingArn
- The ARN of the thing on which the job execution is running.
  - Type: String
  - Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
JobExecutionSummaryForThing

Service: AWS IoT

The job execution summary for a thing.

Contents

jobExecutionSummary

Contains a subset of information about a job execution.

Type: JobExecutionSummary (p. 392) object

Required: No

jobId

The unique identifier you assigned to this job when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: [a-zA-Z0-9-\_\-]+

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
JobProcessDetails

Service: AWS IoT

The job process details.

Contents

numberOfCanceledThings

The number of things that cancelled the job.

Type: Integer

Required: No

numberOfFailedThings

The number of things that failed executing the job.

Type: Integer

Required: No

numberOfInProgressThings

The number of things currently executing the job.

Type: Integer

Required: No

numberOfQueuedThings

The number of things that are awaiting execution of the job.

Type: Integer

Required: No

numberOfRejectedThings

The number of things that rejected the job.

Type: Integer

Required: No

numberOfRemovedThings

The number of things that are no longer scheduled to execute the job because they have been deleted or have been removed from the group that was a target of the job.

Type: Integer

Required: No

numberOfSucceededThings

The number of things which successfully completed the job.

Type: Integer

Required: No
**processingTargets**

The devices on which the job is executing.

Type: Array of strings

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
## JobSummary

Service: AWS IoT

The job summary.

### Contents

- **completedAt**
  - The time, in milliseconds since the epoch, when the job completed.
  - Type: Timestamp
  - Required: No

- **createdAt**
  - The time, in milliseconds since the epoch, when the job was created.
  - Type: Timestamp
  - Required: No

- **jobArn**
  - The job ARN.
  - Type: String
  - Required: No

- **jobId**
  - The unique identifier you assigned to this job when it was created.
  - Type: String
    - Length Constraints: Minimum length of 1. Maximum length of 64.
    - Pattern: [a-zA-Z0-9-\_]+
  - Required: No

- **lastUpdatedAt**
  - The time, in milliseconds since the epoch, when the job was last updated.
  - Type: Timestamp
  - Required: No

- **status**
  - The job summary status.
  - Type: String
    - Valid Values: IN_PROGRESS | CANCELED | COMPLETED
  - Required: No

- **targetSelection**
  - Specifies whether the job will continue to run (CONTINUOUS), or will be complete after all those things specified as targets have completed the job (SNAPSHOT). If continuous, the job may also be
run on a thing when a change is detected in a target. For example, a job will run on a thing when
the thing is added to a target group, even after the job was completed by all things originally in the
group.

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

Required: No

thingGroupId

The ID of the thing group.

Type: String


Pattern: [a-zA-Z0-9\-]+

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
KeyPair
Service: AWS IoT

Describes a key pair.

Contents

PrivateKey
The private key.
Type: String
Length Constraints: Minimum length of 1.
Required: No

PublicKey
The public key.
Type: String
Length Constraints: Minimum length of 1.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
KinesisAction
Service: AWS IoT

Describes an action to write data to an Amazon Kinesis stream.

Contents

partitionKey
  The partition key.
  Type: String
  Required: No

roleArn
  The ARN of the IAM role that grants access to the Amazon Kinesis stream.
  Type: String
  Required: Yes

streamName
  The name of the Amazon Kinesis stream.
  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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
LambdaAction

Service: AWS IoT

Describes an action to invoke a Lambda function.

Contents

functionArn

The ARN of the Lambda function.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
LogginOptionsPayload
Service: AWS IoT

Describes the logging options payload.

Contents

logLevel

The log level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

Required: No

roleArn

The ARN of the IAM role that grants access.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
LogTarget
Service: AWS IoT
A log target.

Contents

**targetName**
The target name.
Type: String
Required: No

**targetType**
The target type.
Type: String
Valid Values: **DEFAULT** | **THING_GROUP**
Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
LogTargetConfiguration
Service: AWS IoT

The target configuration.

Contents

logLevel
The logging level.

Type: String

Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

Required: No

logTarget
A log target

Type: LogTarget (p. 404) object

Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
OTAUpdateFile
Service: AWS IoT

Describes a file to be associated with an OTA update.

Contents

attributes
A list of name/attribute pairs.
Type: String to string map
Required: No

codeSigning
The code signing method of the file.
Type: CodeSigning (p. 368) object
Required: No

fileName
The name of the file.
Type: String
Required: No

fileSource
The source of the file.
Type: Stream (p. 426) object
Required: No

fileVersion
The file version.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
OTAUpdateInfo
Service: AWS IoT
Information about an OTA update.

Contents

additionalParameters
A collection of name/value pairs
Type: String to string map
Required: No

awsIotJobArn
The AWS IoT job ARN associated with the OTA update.
Type: String
Required: No

awsIotJobId
The AWS IoT job ID associated with the OTA update.
Type: String
Required: No

creationDate
The date when the OTA update was created.
Type: Timestamp
Required: No

description
A description of the OTA update.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: [^\p{C}]+
Required: No

errorInfo
Error information associated with the OTA update.
Type: ErrorInfo (p. 379) object
Required: No

lastModifiedDate
The date when the OTA update was last updated.
Type: Timestamp
Required: No

**otaUpdateArn**

The OTA update ARN.

Type: String

Required: No

**otaUpdateFiles**

A list of files associated with the OTA update.

Type: Array of [OTAUpdateFile](#) objects

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: No

**otaUpdateId**

The OTA update ID.

Type: String


Pattern: `[a-zA-Z0-9-_]+`

Required: No

**otaUpdateStatus**

The status of the OTA update.

Type: String

Valid Values: CREATE_PENDING | CREATE_IN_PROGRESS | CREATE_COMPLETE | CREATE_FAILED

Required: No

**targets**

The targets of the OTA update.

Type: Array of strings

Array Members: Minimum number of 1 item.

Required: No

**targetSelection**

Specifies whether the OTA update will continue to run (CONTINUOUS), or will be complete after all those things specified as targets have completed the OTA update (SNAPSHOT). If continuous, the OTA update may also be run on a thing when a change is detected in a target. For example, an OTA update will run on a thing when the thing is added to a target group, even after the OTA update was completed by all things originally in the group.

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
OTAUpdateSummary
Service: AWS IoT

An OTA update summary.

Contents

**creationDate**
The date when the OTA update was created.
Type: Timestamp
Required: No

**otaUpdateArn**
The OTA update ARN.
Type: String
Required: No

**otaUpdateId**
The OTA update ID.
Type: String

Pattern: [a-zA-Z0-9_-]+
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
OutgoingCertificate
Service: AWS IoT

A certificate that has been transferred but not yet accepted.

Contents

certificateArn
  The certificate ARN.
  Type: String
  Required: No

certificateId
  The certificate ID.
  Type: String
  Length Constraints: Fixed length of 64.
  Pattern: (0x)?[a-zA-F0-9]+
  Required: No

creationDate
  The certificate creation date.
  Type: Timestamp
  Required: No

transferDate
  The date the transfer was initiated.
  Type: Timestamp
  Required: No

transferMessage
  The transfer message.
  Type: String
  Length Constraints: Maximum length of 128.
  Required: No

transferredTo
  The AWS account to which the transfer was made.
  Type: String
  Pattern: [0-9]{12}
  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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Policy
Service: AWS IoT

Describes an AWS IoT policy.

Contents

policyArn
  The policy ARN.
  Type: String
  Required: No

policyName
  The policy name.
  Type: String
  Pattern: [\w+=,.@-]+
  Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
**PolicyVersion**

Service: AWS IoT

Describes a policy version.

**Contents**

**createDate**

The date and time the policy was created.

Type: Timestamp

Required: No

**isDefaultVersion**

Specifies whether the policy version is the default.

Type: Boolean

Required: No

**versionId**

The policy version ID.

Type: String

Pattern: \[0–9]+

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
PresignedUrlConfig

Service: AWS IoT

Configuration for pre-signed S3 URLs.

Contents

expiresInSec

How long (in seconds) pre-signed URLs are valid. Valid values are 60 - 3600, the default value is 3600 seconds. Pre-signed URLs are generated when Jobs receives an MQTT request for the job document.

Type: Long

Valid Range: Minimum value of 60. Maximum value of 3600.

Required: No

roleArn

The ARN of an IAM role that grants permission to download files from the S3 bucket where the job data/updates are stored. The role must also grant permission for IoT to download the files.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
PutItemInput
Service: AWS IoT

The input for the DynamoActionVS action that specifies the DynamoDB table to which the message data will be written.

Contents

tableName

The table where the message data will be written

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
RegistrationConfig
Service: AWS IoT

The registration configuration.

Contents

roleArn
The ARN of the role.
Type: String
Required: No

templateBody
The template body.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
RepublishAction
Service: AWS IoT

Describes an action to republish to another topic.

Contents

roleArn
The ARN of the IAM role that grants access.
Type: String
Required: Yes

topic
The name of the MQTT topic.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
RoleAliasDescription
Service: AWS IoT
Role alias description.

Contents

**creationDate**

The UNIX timestamp of when the role alias was created.

Type: Timestamp

Required: No

**credentialDurationSeconds**

The number of seconds for which the credential is valid.

Type: Integer


Required: No

**lastModifiedDate**

The UNIX timestamp of when the role alias was last modified.

Type: Timestamp

Required: No

**owner**

The role alias owner.

Type: String

Pattern: [0-9]{12}

Required: No

**roleAlias**

The role alias.

Type: String


Pattern: [\w=,@-]+

Required: No

**roleArn**

The role ARN.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
S3Action

Service: AWS IoT

Describes an action to write data to an Amazon S3 bucket.

Contents

bucketName

The Amazon S3 bucket.

Type: String

Required: Yes

cannedAcl

The Amazon S3 canned ACL that controls access to the object identified by the object key. For more information, see S3 canned ACLs.

Type: String

Valid Values: private | public-read | public-read-write | aws-exec-read | authenticated-read | bucket-owner-read | bucket-owner-full-control | log-delivery-write

Required: No

key

The object key.

Type: String

Required: Yes

roleArn

The ARN of the IAM role that grants access.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
S3Location
Service: AWS IoT

The location in S3 the contains the files to stream.

Contents

bucket
The S3 bucket that contains the file to stream.
Type: String
Length Constraints: Minimum length of 1.
Required: Yes

key
The name of the file within the S3 bucket to stream.
Type: String
Length Constraints: Minimum length of 1.
Required: Yes

version
The file version.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
SalesforceAction
Service: AWS IoT

Describes an action to write a message to a Salesforce IoT Cloud Input Stream.

Contents

token
The token used to authenticate access to the Salesforce IoT Cloud Input Stream. The token is available from the Salesforce IoT Cloud platform after creation of the Input Stream.

Type: String
Length Constraints: Minimum length of 40.
Required: Yes

url
The URL exposed by the Salesforce IoT Cloud Input Stream. The URL is available from the Salesforce IoT Cloud platform after creation of the Input Stream.

Type: String
Pattern: https://ingestion-[a-zA-Z0-9]{1,12}\.[a-zA-Z0-9-]+\.((sfdc-matrix\.net)|(sfdcnow\.com))/streams/\w{1,20}/\w{1,20}/event
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
SnsAction

Service: AWS IoT

Describes an action to publish to an Amazon SNS topic.

Contents

messageFormat

The message format of the message to publish. Optional. Accepted values are "JSON" and "RAW". The default value of the attribute is "RAW". SNS uses this setting to determine if the payload should be parsed and relevant platform-specific bits of the payload should be extracted. To read more about SNS message formats, see http://docs.aws.amazon.com/sns/latest/dg/json-formats.html refer to their official documentation.

Type: String

Valid Values: RAW | JSON

Required: No

roleArn

The ARN of the IAM role that grants access.

Type: String

Required: Yes

targetArn

The ARN of the SNS topic.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
SqsAction
Service: AWS IoT

Describes an action to publish data to an Amazon SQS queue.

Contents

queueUrl
The URL of the Amazon SQS queue.
Type: String
Required: Yes

roleArn
The ARN of the IAM role that grants access.
Type: String
Required: Yes

useBase64
Specifies whether to use Base64 encoding.
Type: Boolean
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Stream
Service: AWS IoT

Describes a group of files that can be streamed.

Contents

fileId

The ID of a file associated with a stream.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 255.

Required: No

streamId

The stream ID.

Type: String


Pattern: [a-zA-Z0-9-_]+

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
StreamFile
Service: AWS IoT

Represents a file to stream.

Contents

fileId
The file ID.
Type: Integer
Valid Range: Minimum value of 0. Maximum value of 255.
Required: No

s3Location
The location of the file in S3.
Type: S3Location (p. 422) object
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
StreamInfo
Service: AWS IoT
Information about a stream.

Contents

createdAt
The date when the stream was created.
Type: Timestamp
Required: No

description
The description of the stream.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: [^\p{C}]+
Required: No

files
The files to stream.
Type: Array of StreamFile (p. 427) objects
Array Members: Minimum number of 1 item. Maximum number of 10 items.
Required: No

lastUpdatedAt
The date when the stream was last updated.
Type: Timestamp
Required: No

roleArn
An IAM role AWS IoT assumes to access your S3 files.
Type: String
Required: No

streamArn
The stream ARN.
Type: String
Required: No

streamId
The stream ID.
Type: String


Pattern: [a-zA-Z0-9_\-]+

Required: No

streamVersion

The stream version.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 65535.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
StreamSummary
Service: AWS IoT

A summary of a stream.

Contents

description
A description of the stream.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: [^\p{C}]+
Required: No

streamArn
The stream ARN.
Type: String
Required: No

streamId
The stream ID.
Type: String
Pattern: [a-zA-Z0-9_-]+
Required: No

streamVersion
The stream version.
Type: Integer
Valid Range: Minimum value of 0. Maximum value of 65535.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
**ThingAttribute**

Service: AWS IoT

The properties of the thing, including thing name, thing type name, and a list of thing attributes.

**Contents**

**attributes**

A list of thing attributes which are name-value pairs.

Type: String to string map

Key Length Constraints: Maximum length of 128.

Key Pattern: [a-zA-Z0-9_.,@/:#-]+

Value Length Constraints: Maximum length of 800.

Value Pattern: [a-zA-Z0-9_.,@/:#-]*

Required: No

**thingArn**

The thing ARN.

Type: String

Required: No

**thingName**

The name of the thing.

Type: String


Pattern: [a-zA-Z0-9:_-]+

Required: No

**thingTypeName**

The name of the thing type, if the thing has been associated with a type.

Type: String


Pattern: [a-zA-Z0-9:_-]+

Required: No

**version**

The version of the thing record in the registry.

Type: Long

Required: No
See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
**ThingDocument**

Service: AWS IoT

The thing search index document.

**Contents**

**attributes**

The attributes.

Type: String to string map

Key Length Constraints: Maximum length of 128.

Key Pattern: \[a-zA-Z0-9_-.@:/#-]+\n
Value Length Constraints: Maximum length of 800.

Value Pattern: \[a-zA-Z0-9_-.@:/#-]*\n
Required: No

**shadow**

The shadow.

Type: String

Required: No

**thingGroupNames**

Thing group names.

Type: Array of strings


Pattern: \[a-zA-Z0-9:.-]+\n
Required: No

**thingId**

The thing ID.

Type: String

Required: No

**thingName**

The thing name.

Type: String


Pattern: \[a-zA-Z0-9:.-]+\n
Required: No
thingTypeName

The thing type name.

Type: String


Pattern: [a-zA-Z0-9:_-]+

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ThingGroupMetadata
Service: AWS IoT

Thing group metadata.

Contents

creationDate
The UNIX timestamp of when the thing group was created.
Type: Timestamp
Required: No

parentGroupName
The parent thing group name.
Type: String
Pattern: [a-zA-Z0-9:_-]+
Required: No

rootToParentThingGroups
The root parent thing group.
Type: Array of GroupNameAndArn (p. 382) 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 Go
• AWS SDK for Java
• AWS SDK for Ruby V2
ThingGroupProperties
Service: AWS IoT

Thing group properties.

Contents

attributePayload
The thing group attributes in JSON format.
Type: AttributePayload (p. 353) object
Required: No

thingGroupDescription
The thing group description.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: [\p{Graph}\x20]*
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ThingIndexingConfiguration

Service: AWS IoT

Thing indexing configuration.

Contents

thingIndexingMode

Thing indexing mode. Valid values are:

- REGISTRY – Your thing index will contain only registry data.
- REGISTRY_AND_SHADOW - Your thing index will contain registry and shadow data.
- OFF - Thing indexing is disabled.

Type: String

Valid Values: OFF | REGISTRY | REGISTRY_AND_SHADOW

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
**ThingTypeDefinition**

Service: AWS IoT

The definition of the thing type, including thing type name and description.

**Contents**

- **thingTypeArn**
  - The thing type ARN.
  - Type: String
  - Required: No

- **thingTypeMetadata**
  - The ThingTypeMetadata contains additional information about the thing type including: creation date and time, a value indicating whether the thing type is deprecated, and a date and time when it was deprecated.
  - Type: `ThingTypeMetadata (p. 439)` object
  - Required: No

- **thingTypeName**
  - The name of the thing type.
  - Type: String
  - Pattern: `[a-zA-Z0-9-_]+`
  - Required: No

- **thingTypeProperties**
  - The ThingTypeProperties for the thing type.
  - Type: `ThingTypeProperties (p. 440)` object
  - Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ThingTypeMetadata
Service: AWS IoT

The ThingTypeMetadata contains additional information about the thing type including: creation date and time, a value indicating whether the thing type is deprecated, and a date and time when time was deprecated.

Contents

creationDate

The date and time when the thing type was created.

Type: Timestamp
Required: No

deprecated

Whether the thing type is deprecated. If true, no new things could be associated with this type.

Type: Boolean
Required: No

deprecationDate

The date and time when the thing type was deprecated.

Type: Timestamp
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ThingTypeProperties
Service: AWS IoT

The ThingTypeProperties contains information about the thing type including: a thing type description, and a list of searchable thing attribute names.

Contents

searchableAttributes
A list of searchable thing attribute names.
Type: Array of strings
Length Constraints: Maximum length of 128.
Pattern: [a-zA-Z0-9_,@/:#-]+
Required: No

thingTypeDescription
The description of the thing type.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: \p{Graph}*\x20*
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
TopicRule
Service: AWS IoT

Describes a rule.

Contents

actions
The actions associated with the rule.
Type: Array of Action (p. 349) objects
Array Members: Minimum number of 0 items. Maximum number of 10 items.
Required: No

awsIotSqlVersion
The version of the SQL rules engine to use when evaluating the rule.
Type: String
Required: No

createdAt
The date and time the rule was created.
Type: Timestamp
Required: No

description
The description of the rule.
Type: String
Required: No

errorAction
The action to perform when an error occurs.
Type: Action (p. 349) object
Required: No

ruleDisabled
Specifies whether the rule is disabled.
Type: Boolean
Required: No

ruleName
The name of the rule.
Type: String
Pattern: \^[a-zA-Z0-9_]+\$

Required: No

sql

The SQL statement used to query the topic. When using a SQL query with multiple lines, be sure to escape the newline characters.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
**TopicRuleListItem**

Service: AWS IoT

Describes a rule.

**Contents**

- **createdAt**
  
  The date and time the rule was created.
  
  Type: Timestamp
  
  Required: No

- **ruleArn**
  
  The rule ARN.
  
  Type: String
  
  Required: No

- **ruleDisabled**
  
  Specifies whether the rule is disabled.
  
  Type: Boolean
  
  Required: No

- **ruleName**
  
  The name of the rule.
  
  Type: String
  
  
  Pattern: ^[a-zA-Z0-9_]+$
  
  Required: No

- **topicPattern**
  
  The pattern for the topic names that apply.
  
  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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
TopicRulePayload

Service: AWS IoT

Describes a rule.

Contents

actions

The actions associated with the rule.

Type: Array of Action (p. 349) objects

Array Members: Minimum number of 0 items. Maximum number of 10 items.

Required: Yes

awsIotSqlVersion

The version of the SQL rules engine to use when evaluating the rule.

Type: String

Required: No

description

The description of the rule.

Type: String

Required: No

errorAction

The action to take when an error occurs.

Type: Action (p. 349) object

Required: No

ruleDisabled

Specifies whether the rule is disabled.

Type: Boolean

Required: No

sql

The SQL statement used to query the topic. For more information, see AWS IoT SQL Reference in the AWS IoT Developer Guide.

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 Go
• AWS SDK for Java
• AWS SDK for Ruby V2
TransferData
Service: AWS IoT

Data used to transfer a certificate to an AWS account.

Contents

acceptDate
The date the transfer was accepted.
Type: Timestamp
Required: No

rejectDate
The date the transfer was rejected.
Type: Timestamp
Required: No

rejectReason
The reason why the transfer was rejected.
Type: String
Length Constraints: Maximum length of 128.
Required: No

transferDate
The date the transfer took place.
Type: Timestamp
Required: No

transferMessage
The transfer message.
Type: String
Length Constraints: Maximum length of 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AWS IoT Data Plane

The following data types are supported by AWS IoT Data Plane:

AWS IoT Jobs Data Plane

The following data types are supported by AWS IoT Jobs Data Plane:

- JobExecution (p. 448)
- JobExecutionState (p. 450)
- JobExecutionSummary (p. 451)
JobExecution
Service: AWS IoT Jobs Data Plane
Contains data about a job execution.

Contents

executionNumber
A number that identifies a particular job execution on a particular device. It can be used later in commands that return or update job execution information.
Type: Long
Required: No

jobDocument
The content of the job document.
Type: String
Length Constraints: Maximum length of 32768.
Required: No

jobId
The unique identifier you assigned to this job when it was created.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [a-zA-Z0-9_-]+
Required: No

lastUpdatedAt
The time, in milliseconds since the epoch, when the job execution was last updated.
Type: Long
Required: No

queuedAt
The time, in milliseconds since the epoch, when the job execution was enqueued.
Type: Long
Required: No

startedAt
The time, in milliseconds since the epoch, when the job execution was started.
Type: Long
Required: No

status
The status of the job execution. Can be one of: "QUEUED", "IN_PROGRESS", "FAILED", "SUCCESS", "CANCELED", "REJECTED", or "REMOVED".
Type: String

Valid Values: QUEUED | IN_PROGRESS | SUCCEEDED | FAILED | REJECTED | REMOVED | CANCELED

Required: No

**statusDetails**

A collection of name/value pairs that describe the status of the job execution.

Type: String to string map

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

Key Pattern: [a-zA-Z0-9:_-]+


Value Pattern: [^\p{C}]*+

Required: No

**thingName**

The name of the thing that is executing the job.

Type: String


Pattern: [a-zA-Z0-9:_-]+

Required: No

**versionNumber**

The version of the job execution. Job execution versions are incremented each time they are updated by a device.

Type: Long

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
JobExecutionState
Service: AWS IoT Jobs Data Plane
Contains data about the state of a job execution.

Contents

status
The status of the job execution. Can be one of: "QUEUED", "IN_PROGRESS", "FAILED", "SUCCEEDED", "CANCELED", "REJECTED", or "REMOVED".
Type: String
Valid Values: QUEUED | IN_PROGRESS | SUCCEEDED | FAILED | REJECTED | REMOVED | CANCELED
Required: No

statusDetails
A collection of name/value pairs that describe the status of the job execution.
Type: String to string map
Key Length Constraints: Minimum length of 1. Maximum length of 128.
Key Pattern: [a-zA-Z0-9:_-]+
Value Pattern: [^\p{C}]*+
Required: No

versionNumber
The version of the job execution. Job execution versions are incremented each time they are updated by a device.
Type: Long
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
JobExecutionSummary
Service: AWS IoT Jobs Data Plane

Contains a subset of information about a job execution.

Contents

executionNumber
A number that identifies a particular job execution on a particular device.
Type: Long
Required: No

jobId
The unique identifier you assigned to this job when it was created.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [a-zA-Z0-9_−]+
Required: No

lastUpdatedAt
The time, in milliseconds since the epoch, when the job execution was last updated.
Type: Long
Required: No

queuedAt
The time, in milliseconds since the epoch, when the job execution was enqueued.
Type: Long
Required: No

startedAt
The time, in milliseconds since the epoch, when the job execution started.
Type: Long
Required: No

versionNumber
The version of the job execution. Job execution versions are incremented each time AWS IoT Jobs receives an update from a device.
Type: Long
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for Ruby V2
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 Signature Version 4 Signing Process in the Amazon Web Services General Reference.

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.

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

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 Handling Dates in Signature Version 4 in the Amazon Web Services General Reference.

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 Security Token Service, go to AWS Services That Work with IAM in the IAM User Guide.

Condition: If you're using temporary security credentials from the AWS Security Token Service, 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 Task 1: Create a Canonical Request For Signature Version 4 in the Amazon Web Services General Reference.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string
Required: Conditional