AWS IoT

API Reference
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.AWS IoT API Reference
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.

For information about how to use the credentials provider for AWS IoT, see Authorizing Direct Calls to AWS Services.

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.
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### 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. 194) 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. 9)

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. 9)

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

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
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. 11)**

The ARN of the thing to add to a group.

Type: String

Required: No

**thingGroupArn (p. 11)**

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

Type: String

Required: No

**thingGroupName (p. 11)**

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

Type: String


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

Required: No

**thingName (p. 11)**

The name of the thing to add to a 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
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- AWS SDK for Go
- AWS SDK for Java
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- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
AssociateTargetsWithJob

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. 13)**

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. 13)**

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. 13)**

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. 14)
   A short text description of the job.
   Type: String
   Length Constraints: Maximum length of 2028.
   Pattern: [^\p{C}]+

jobArn (p. 14)
   An ARN identifying the job.
   Type: String

jobId (p. 14)
   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

LimitExceeded Exception
   A limit has been exceeded.
   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. 16)**

The name of the policy to attach.


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

**Request Body**

The request accepts the following data in JSON format.

**target (p. 16)**

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
A limit has been exceeded.
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. 16) 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. 18)

The policy name.


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

**principal** (p. 18)

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
**LimitExceededException**
A limit has been exceeded.
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](#)
AttachThingPrincipal

Service: AWS IoT

Attaches the specified principal to the specified thing.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

- **principal** (p. 20)
  - The principal, such as a certificate or other credential.

- **thingName** (p. 20)
  - The name of the thing.
  - Pattern: `[a-zA-Z0-9:_-]+`

Request Body

The request does not have a request body.

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

- **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. 267) 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. 22)

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

```plaintext
PUT /jobs/jobId/cancel?force=force HTTP/1.1
Content-type: application/json

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

URI Request Parameters

The request requires the following URI parameters.

- **force (p. 24)**
- **jobId (p. 24)**

  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. 24)**

  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

```plaintext
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. 24)

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

jobArn (p. 24)

The job ARN.

Type: String

jobId (p. 24)

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
CancelJobExecution
Service: AWS IoT

Request Syntax

```
PUT /things/thingName/jobs/jobId/cancel?force=force HTTP/1.1
Content-type: application/json

{
    "expectedVersion": number,
    "statusDetails": {
        "string": "string"
    }
}
```

URI Request Parameters
The request requires the following URI parameters.

- **force (p. 27)**
- **jobId (p. 27)**
  - Length Constraints: Minimum length of 1. Maximum length of 64.
  - Pattern: [a-zA-Z0-9-_]+
- **thingName (p. 27)**
  - Pattern: [a-zA-Z0-9-_]+

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

- **expectedVersion (p. 27)**
  - Type: Long
  - Required: No

- **statusDetails (p. 27)**
  - Type: String to string map
  - Key Pattern: [a-zA-Z0-9-_]+
  - Value Pattern: [^\p{C}]++
  - Required: No

Response Syntax

```
HTTP/1.1 200
```

27
Response Elements

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

Errors

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

InvalidStateTransitionException

An attempt was made to change to an invalid state, for example by deleting a job or a job execution which is "IN_PROGRESS" without setting the force parameter.

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

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
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. 31)

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

Request Body

The request accepts the following data in JSON format.

authorizerFunctionArn (p. 31)

   The ARN of the authorizer's Lambda function.
   Type: String
   Required: Yes

status (p. 31)

   The status of the create authorizer request.
   Type: String
   Valid Values: ACTIVE | INACTIVE
   Required: No

tokenKeyName (p. 31)

   The name of the token key used to extract the token from the HTTP headers.
   Type: String
CreateAuthorizer

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

tokenSigningPublicKeys (p. 31)
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. 32)
The authorizer ARN.
Type: String

authorizerName (p. 32)
The authorizer's 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
A limit has been exceeded.
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:

```bash
$ 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:

```bash
$ 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:

```powershell
> 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:

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

Request Syntax

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

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

URI Request Parameters

The request requires the following URI parameters.

**setAsActive (p. 34)**

Specifies whether the certificate is active.
Request Body

The request accepts the following data in JSON format.

**certificateSigningRequest (p. 34)**

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. 35)**

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

- Type: String

**certificateId (p. 35)**

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. 35)**

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. 37)**

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. 37)**

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]*

Required: No

**document (p. 37)**

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

Required: No

documentParameters (p. 37)
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. 37)
An S3 link to the job document.
Type: String

Required: No
jobExecutionsRolloutConfig (p. 37)
Allows you to create a staged rollout of the job.
Type: JobExecutionsRolloutConfig (p. 401) object

Required: No
presignedUrlConfig (p. 37)
Configuration information for pre-signed S3 URLs.
Type: PresignedUrlConfig (p. 426) object

Required: No
targets (p. 37)
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. 37)
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. 39)

The job description.

Type: String

Length Constraints: Maximum length of 2028.

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

jobArn (p. 39)

The job ARN.

Type: String

jobId (p. 39)

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

LimitExceeded Exception

A limit has been exceeded.
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=setAsActive HTTP/1.1
```

**URI Request Parameters**

The request requires the following URI parameters.

- **setAsActive** *(p. 41)*
  
  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. 41)*
  
  The ARN of the certificate.

  Type: String

- **certificateId** *(p. 41)*
  
  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. 41)

The certificate data, in PEM format.

Type: String


keyPair (p. 41)

The generated key pair.

Type: KeyPair (p. 411) 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

```
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"
            }
          }
        }
      }
    },
    "signatureAlgorithm": "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. 44)

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. 44)**
  A list of additional OTA update parameters which are name-value pairs.
  Type: String to string map
  Required: No

- **description (p. 44)**
  The description of the OTA update.
  Type: String
  Length Constraints: Maximum length of 2028.
  Pattern: ^[^\p{C}]+$
  Required: No

- **files (p. 44)**
  The files to be streamed by the OTA update.
  Type: Array of OTAUpdateFile (p. 417) objects
  Array Members: Minimum number of 1 item. Maximum number of 10 items.
  Required: Yes

- **roleArn (p. 44)**
  The IAM role that allows access to the AWS IoT Jobs service.
  Type: String
  Required: Yes

- **targets (p. 44)**
  The targeted devices to receive OTA updates.
  Type: Array of strings
  Array Members: Minimum number of 1 item.
  Required: Yes

- **targetSelection (p. 44)**
  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

```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. 46)**

The AWS IoT job ARN associated with the OTA update.

Type: String

**awsIotJobId (p. 46)**

The AWS IoT job ID associated with the OTA update.

Type: String

**otaUpdateArn (p. 46)**

The OTA update ARN.

Type: String

**otaUpdateId (p. 46)**

The OTA update ID.

Type: String


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

**otaUpdateStatus (p. 46)**

The OTA update status.

Type: String

46
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

POST /policies/{policyName} 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+=,.@-]+

Request Body

The request accepts the following data in JSON format.

policyDocument (p. 49)

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. 49)**
- The policy ARN.
- Type: String

**policyDocument (p. 49)**
- The JSON document that describes the policy.
- Type: String

**policyName (p. 49)**
- The policy name.
- Type: String
  - Pattern: [$\w+=,.@-]+$

**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

**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. 90) 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. 52)**

The policy name.


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

**setAsDefault (p. 52)**

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. 52)**

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. 52)

Specifies whether the policy version is the default.

Type: Boolean

policyArn (p. 52)

The policy ARN.

Type: String

policyDocument (p. 52)

The JSON document that describes the policy.

Type: String

policyVersionId (p. 52)

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

VersionsLimitExceedededException

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

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. 55)

   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. 55)

   How long (in seconds) the credentials will be valid.
   Type: Integer
   Required: No

roleArn (p. 55)

   The role ARN.
   Type: String
   Required: Yes

Response Syntax

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

```
{
  "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. 55)

The role alias.

Type: String


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

**roleAliasArn** (p. 55)

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**

A limit has been exceeded.

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. 58)**

The stream ID.


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

Request Body

The request accepts the following data in JSON format.

**description (p. 58)**

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+
files (p. 58)

The files to stream.

Type: Array of StreamFile (p. 438) objects

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

Required: Yes

roleArn (p. 58)

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

```
{
  "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. 59)

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

streamArn (p. 59)

The stream ARN.

Type: String

streamId (p. 59)

The stream ID.

Type: String

CreateStream

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

streamVersion (p. 59)

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.

Note
This is a control plane operation. See Authorization for information about authorizing control plane actions.

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. 62)**

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. 62)**

The attribute payload, which consists of up to three name/value pairs in a JSON document. For example:

```
{"attributes":{"string1":"string2"}}
```

Type: AttributePayload (p. 362) object

Required: No

**thingTypeName (p. 62)**

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. 63)
  The ARN of the new thing.
  Type: String

thingId (p. 63)
  The thing ID.
  Type: String

thingName (p. 63)
  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

Create a thing group.

**Note**
This is a control plane operation. See Authorization for information about authorizing control plane actions.

**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. 65)**

The thing group name to create.


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

**Request Body**

The request accepts the following data in JSON format.

**parentGroupName (p. 65)**

The name of the parent thing group.

Type: String


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

Required: No

**thingGroupProperties (p. 65)**

The thing group properties.
Type: `ThingGroupProperties` (p. 447) object

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

```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. 66)

The thing group ARN.

Type: String

`thingGroupId` (p. 66)

The thing group ID.

Type: String


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

`thingGroupName` (p. 66)

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. 68)**

The name of the thing type.


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

Request Body

The request accepts the following data in JSON format.

**thingTypeProperties (p. 68)**

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. 451) 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. 68)**

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

Type: String

**thingTypeId (p. 68)**

The thing type ID.

Type: String

**thingTypeName (p. 68)**

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"
        }
      }
    ]
  }
}
"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": "string",
      "rangeKey": "string",
      "streamName": "string",
      "roleArn": "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. 71)

The name of the rule.


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

Request Body

The request accepts the following data in JSON format.

topicRulePayload (p. 71)

The rule payload.

Type: TopicRulePayload (p. 455) 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. 76)**

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

```text
DELETE /cacertificate/caCertificateId HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

certificateId (p. 78)

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

```text
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. 150) API to detach all policies. Next, use the UpdateCertificate (p. 311) 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. 80)

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. 80)

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
DeleteJob
Service: AWS IoT

Deletes a job and its related job executions.

Deleting a job may take time, depending on the number of job executions created for the job and various other factors. While the job is being deleted, the status of the job will be shown as "DELETION_IN_PROGRESS". Attempting to delete or cancel a job whose status is already "DELETION_IN_PROGRESS" will result in an error.

Only 10 jobs may have status "DELETION_IN_PROGRESS" at the same time, or a LimitExceededException will occur.

Request Syntax

DELETE /jobs/jobId?force=force HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

force (p. 82)
(Optional) When true, you can delete a job which is "IN_PROGRESS". Otherwise, you can only delete a job which is in a terminal state ("COMPLETED" or "CANCELED") or an exception will occur. The default is false.

**Note**
Deleting a job which is "IN_PROGRESS", will cause a device which is executing the job to be unable to access job information or update the job execution status. Use caution and ensure that each device executing a job which is deleted is able to recover to a valid state.

jobId (p. 82)

The ID of the job to be deleted.

After a job deletion is completed, you may reuse this jobId when you create a new job. However, this is not recommended, and you must ensure that your devices are not using the jobId to refer to the deleted job.

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

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

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

InvalidStateTransitionException
An attempt was made to change to an invalid state, for example by deleting a job or a job execution which is "IN_PROGRESS" without setting the force parameter.
HTTP Status Code: 409

LimitExceededException
A limit has been exceeded.
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
DeleteJobExecution

Service: AWS IoT

Deletes a job execution.

Request Syntax

DELETE /things/thingName/jobs/jobId/jobId/executionNumber/executionNumber?force=force HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

executionNumber (p. 84)

The ID of the job execution to be deleted. The executionNumber refers to the execution of a particular job on a particular device.

Note that once a job execution is deleted, the executionNumber may be reused by IoT, so be sure you get and use the correct value here.

force (p. 84)

(Optional) When true, you can delete a job execution which is "IN_PROGRESS". Otherwise, you can only delete a job execution which is in a terminal state ("SUCCEEDED", "FAILED", "REJECTED", "REMOVED" or "CANCELED") or an exception will occur. The default is false.

Note

Deleting a job execution which is "IN_PROGRESS", will cause the device to be unable to access job information or update the job execution status. Use caution and ensure that the device is able to recover to a valid state.

jobId (p. 84)

The ID of the job whose execution on a particular device will be deleted.

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

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

thingName (p. 84)

The name of the thing whose job execution will be deleted.


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

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

InvalidStateTransitionException

An attempt was made to change to an invalid state, for example by deleting a job or a job execution which is "IN_PROGRESS" without setting the force parameter.

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
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. 86)**
- 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. 88)

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. 88). 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. 90)**

The name of the policy.


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

**policyVersionId (p. 90)**

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. 94)

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. 96)**

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. 98)*

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`.

*thingName (p. 98)*

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. 100)

The expected version of the thing group to delete.

thingGroupName (p. 100)

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. 108), then remove any associated things by calling UpdateThing (p. 323) to change the thing type on any associated thing, and finally use DeleteThingType (p. 102) 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. 102)

  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. 104)
   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. 106)**

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

**targetType (p. 106)**

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

```plaintext
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. 108)

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. 108)

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

```text
GET /authorizer/authorizerName HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**authorizerName (p. 110)**

The name of the authorizer to describe.

- **Length Constraints:** Minimum length of 1. Maximum length of 128.
- **Pattern:** [\w=,@-]+

Request Body

The request does not have a request body.

Response Syntax

```text
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. 110)**

The authorizer description.

- **Type:** AuthorizerDescription (p. 364) 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. 112)

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,
        "customerVersion": number,
        "generationId": "string",
        "lastModifiedDate": number,
        "ownedBy": "string",
        "status": "string",
        "validity": {
            "notAfter": number,
            "notBefore": number
        }
    },
    "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. 112)**

The CA certificate description.

Type: [CACertificateDescription (p. 369)]

**registrationConfig (p. 112)**

Information about the registration configuration.

Type: [RegistrationConfig (p. 428)]

**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. 115)

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,  "customerVersion": number,  "generationId": "string",  "lastModifiedDate": number,  "ownedBy": "string",  "previousOwnedBy": "string",  "status": "string",  "transferData": {  "acceptDate": number,  "rejectDate": number,  "rejectReason": "string",  "transferDate": number,  "transferMessage": "string"  },  "validity": {  "notAfter": number,  "notBefore": number  }  }  }

115
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. 115)

The description of the certificate.

Type: CertificateDescription (p. 372) 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,
    "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. 118)

The default authorizer's description.

Type: AuthorizerDescription (p. 364) 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.

dropdown

endpointType (p. 120)
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.

dropdown

endpointAddress (p. 120)
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. 122)

The creation date of the event configuration.

Type: Timestamp
eventConfigurations (p. 122)

The event configurations.

Type: String to Configuration (p. 382) object map

Valid Keys: THING | THING_GROUP | THING_TYPE | THING_GROUP_MEMBERSHIP | THING_GROUP_HIERARCHY | THING_TYPE_ASSOCIATION | JOB | JOB_EXECUTION

lastModifiedDate (p. 122)

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. 124)**

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. 124)**

The index name.

Type: String


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

**indexStatus (p. 124)**

The index status.
Type: String

Valid Values: ACTIVE | BUILDING | REBUILDING

schema (p. 124)

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. 127)
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

```json
{
  "documentSource": "string",
  "job": {
    "comment": "string",
    "completedAt": number,
    "createdAt": number,
    "description": "string",
    "documentParameters": {
      "string": "string"
    },
    "forceCanceled": boolean,
    "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": {
```

127
"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. 127)**

An S3 link to the job document.

Type: String


**job (p. 127)**

Information about the job.

Type: Job (p. 396) 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. 130)

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

jobId (p. 130)

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. 130)

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,
      "forceCanceled": boolean,
      "jobId": "string",
      "lastUpdatedAt": number,
      "queuedAt": number,
      "startedAt": number,
      "status": "string",
      "statusDetails": {
         "detailsMap": {
            "string": "string"
         }
      },
      "thingArn": "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. 130)**

Information about the job execution.

Type: JobExecution (p. 399) 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. 132)

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",
    "roleAliasArn": "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. 132)

The role alias description.

Type: RoleAliasDescription (p. 430) 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. 134)

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

```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. 134)

Information about the stream.

Type: StreamInfo (p. 439) 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
Gets information about the specified thing.

Request Syntax

```
GET /things/thingName HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**thingName (p. 136)**
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
{
    "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. 136)**
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. 136)

The default client ID.

Type: String

thingArn (p. 136)

The ARN of the thing to describe.

Type: String

thingId (p. 136)

The ID of the thing to describe.

Type: String

thingName (p. 136)

The name of the thing.

Type: String


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

thingTypeName (p. 136)

The thing type name.

Type: String


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

version (p. 136)

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. 139)**

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. 139)

The thing group ARN.

Type: String

thingGroupId (p. 139)

The thing group ID.

Type: String


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

thingGroupMetadata (p. 139)

Thing group metadata.

Type: ThingGroupMetadata (p. 446) object

thingGroupName (p. 139)

The name of the thing group.

Type: String


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

thingGroupProperties (p. 139)

The thing group properties.

Type: ThingGroupProperties (p. 447) object

version (p. 139)

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. 142)

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. 142)

The task creation date.

Type: Timestamp

failureCount (p. 142)

The number of things that failed to be provisioned.
Type: Integer

**inputFileBucket (p. 142)**

The S3 bucket that contains the input file.

Type: String


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

**inputFileKey (p. 142)**

The input file key.

Type: String


Pattern: `[a-zA-Z0-9!_.*'()-/]+`

**lastModifiedDate (p. 142)**

The date when the task was last modified.

Type: Timestamp

**message (p. 142)**

The message.

Type: String

Length Constraints: Maximum length of 2048.

**percentageProgress (p. 142)**

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. 142)**

The role ARN that grants access to the input file bucket.

Type: String


**status (p. 142)**

The status of the bulk thing provisioning task.

Type: String

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

**successCount (p. 142)**

The number of things successfully provisioned.

Type: Integer

**taskId (p. 142)**

The task ID.
Type: String
Length Constraints: Maximum length of 40.

**templateBody (p. 142)**
The task's template.

**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. 145)

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

{
  "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. 145)

The thing type ARN.

Type: String
**thingTypeId (p. 145)**

The thing type ID.

Type: String

**thingTypeMetadata (p. 145)**

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. 450) object

**thingTypeName (p. 145)**

The name of the thing type.

Type: String


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

**thingTypeProperties (p. 145)**

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

Type: ThingTypeProperties (p. 451) 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. 148)**
  
  The policy to detach.
  
  
  Pattern: `[\w+=,\@-]+`

**Request Body**

The request accepts the following data in JSON format.

- **target (p. 148)**
  
  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

LimitExceeded Exception
A limit has been exceeded.
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. 148) 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. 150)
  - The name of the policy to detach.
  - Pattern: `[\w+=,.@\-]+`

- **principal** (p. 150)
  - 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. 152)

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. 152)

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. 154)**
  - 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. 156)

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 a list of the policies that have an effect on the authorization behavior of the specified device when it connects to the AWS IoT device gateway.

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. 158)
The thing name.
Pattern: [a-zA-Z0-9:._-]+

Request Body

The request accepts the following data in JSON format.

cognitoIdentityPoolId (p. 158)
The Cognito identity pool ID.
Type: String
Required: No

principal (p. 158)
The principal.
Type: String
Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "effectivePolicies": [
    

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. 158)

The effective policies.

Type: Array of EffectivePolicy (p. 388) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

LimitExceededException

A limit has been exceeded.

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. 161)*

Thing indexing configuration.

Type: ThingIndexingConfiguration (p. 448) 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. 163)

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. 163)

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

{
   "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. 165)

   The logging level.

   Type: String

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

roleArn (p. 165)

   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. 167)

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",
      "otaUpdateArn": "string",
      "otaUpdateFiles": {
         "attributes": {
            "float": "float"
         },
         "codeSigning": {
            "awsSignerJobId": "string",
            "customCodeSigning": {
               "certificateChain": {
                  "certificateName": "string",
                  "inlineDocument": "string",
                  "stream": {
                     "fileId": number,
               "otaUpdateFiles": [
}
}
"streamId": "string"
},
"hashAlgorithm": "string",
"signature": {
  "inlineDocument": blob,
  "stream": {
    "fileId": number,
    "streamId": "string"
  }
},
"signatureAlgorithm": "string"
},
"fileName": "string",
"fileSource": {
  "fileId": number,
  "streamId": "string"
},
"FileVersion": "string"
},
"otaUpdateId": "string",
"otaUpdateStatus": "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.

otaUpdateInfo (p. 167)

The OTA update info.

Type: OTAUpdateInfo (p. 418) 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. 170)**

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

{
    "creationDate": number,
    "defaultVersionId": "string",
    "generationId": "string",
    "lastModifiedDate": number,
    "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.

**creationDate (p. 170)**

The date the policy was created.

Type: Timestamp

**defaultVersionId (p. 170)**

The default policy version ID.

Type: String
Pattern: [0-9]+  

**generationId (p. 170)**  
The generation ID of the policy.  
Type: String

**lastModifiedDate (p. 170)**  
The date the policy was last modified.  
Type: Timestamp

**policyArn (p. 170)**  
The policy ARN.  
Type: String

**policyDocument (p. 170)**  
The JSON document that describes the policy.  
Type: String

**policyName (p. 170)**  
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. 173)

The name of the policy.


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

policyVersionId (p. 173)

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

{
    "creationDate": number,
    "generationId": "string",
    "isDefaultVersion": boolean,
    "lastModifiedDate": number,
    "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.

creationDate (p. 173)

The date the policy version was created.
Type: Timestamp

generationId (p. 173)
The generation ID of the policy version.

Type: String

isDefaultVersion (p. 173)
Specifies whether the policy version is the default.

Type: Boolean

lastModifiedDate (p. 173)
The date the policy version was last modified.

Type: Timestamp

policyArn (p. 173)
The policy ARN.

Type: String

policyDocument (p. 173)
The JSON document that describes the policy.

Type: String

policyName (p. 173)
The policy name.

Type: String


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

policyVersionId (p. 173)
The policy version ID.

Type: String

Pattern: [0-9]+
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. 176)

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

Errors

InternalServerErrorException

  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. 178)
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
}
"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. 178)**

The rule.

Type: TopicRule (p. 452) object

**ruleArn (p. 178)**

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
Get 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. 183)
   The default log level.
Type: String
Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED
disableAllLogs (p. 183)
   Disables all logs.
Type: Boolean
roleArn (p. 183)
   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. 185)**
  
  The token to retrieve the next set of results.

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

- **pageSize (p. 185)**

  The maximum number of results to be returned per request.


- **recursive (p. 185)**

  When true, recursively list attached policies.

- **target (p. 185)**

  The group for which the policies will be listed.

**Request Body**

The request does not have a request body.

**Response Syntax**

```json
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. 185)
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. 185)
The policies.
Type: Array of Policy (p. 424) objects

Errors

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

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

LimitExceededException
A limit has been exceeded.
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
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. 188)
Return the list of authorizers in ascending alphabetical order.

marker (p. 188)
A marker used to get the next set of results.
Pattern: [A-Za-z0-9+/*]+={0,2}

pageSize (p. 188)
The maximum number of results to return at one time.

status (p. 188)
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.
ListAuthorizers

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

**authorizers (p. 188)**

The authorizers.

Type: Array of AuthorizerSummary (p. 366) objects

**nextMarker (p. 188)**

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=ascendingOrder&marker=marker&pageSize=pageSize
HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

ascendingOrder (p. 191)
Determines the order of the results.

marker (p. 191)
The marker for the next set of results.
Pattern: [A-Za-z0-9+/]+=\{0,2\}

pageSize (p. 191)
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. 191)
The CA certificates registered in your AWS account.
Type: Array of CACertificate (p. 368) objects

nextMarker (p. 191)
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. 194)

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

marker (p. 194)

The marker for the next set of results.

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

pageSize (p. 194)

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. 194)**

The descriptions of the certificates.

Type: Array of Certificate (p. 371) objects

**nextMarker (p. 194)**

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
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. 197)**

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

**caCertificateId (p. 197)**

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. 197)**

The marker for the next set of results.

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

**pageSize (p. 197)**

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. 197)`

The device certificates signed by the specified CA certificate.

Type: Array of Certificate (p. 371) objects

`nextMarker (p. 197)`

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. 200)

The maximum number of results to return at one time.

nextToken (p. 200)

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. 200)

The index names.
Type: Array of strings
Pattern: [a-zA-Z0-9-_:]+

nextToken (p. 200)

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. 202)**

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. 202)**

The maximum number of results to be returned per request.


**nextToken (p. 202)**

The token to retrieve the next set of results.

**status (p. 202)**

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

```json
{
  "executionSummaries": [
    {
      "jobExecutionSummary": {
        "executionNumber": number,
        "lastUpdatedAt": number,
        "queuedAt": number,
        "startedAt": number,
        "status": "string"
      },
      "thingArn": "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.

**executionSummaries (p. 202)**

A list of job execution summaries.

Type: Array of `JobExecutionSummaryForJob (p. 405)` objects

**nextToken (p. 202)**

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. 205)

The maximum number of results to be returned per request.


nextToken (p. 205)

The token to retrieve the next set of results.

status (p. 205)

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

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

tingName (p. 205)

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. 205)**

A list of job execution summaries.

Type: Array of JobExecutionSummaryForThing (p. 406) objects

**nextToken (p. 205)**

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. 208)**

The maximum number of results to return per request.


**nextToken (p. 208)**

The token to retrieve the next set of results.

**status (p. 208)**

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

Valid Values: IN_PROGRESS | CANCELED | COMPLETED | DELETION_IN_PROGRESS

**targetSelection (p. 208)**

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. 208)**

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


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

**thingGroupName (p. 208)**

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

```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. 209)**

A list of jobs.

Type: Array of JobSummary (p. 409) objects

**nextToken (p. 209)**

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=&nextToken=&otaUpdateStatus=HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 211)

The maximum number of results to return at one time.

nextToken (p. 211)

A token used to retrieve the next set of results.

otaUpdateStatus (p. 211)

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. 211)

A token to use to get the next set of results.
Type: String

otaUpdates (p. 211)

A list of OTA update jobs.
Type: Array of OTAUpdateSummary (p. 421) 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. 213)**
  Specifies the order for results. If True, the results are returned in ascending order, based on the creation date.

- **marker (p. 213)**
  The marker for the next set of results.

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

- **pageSize (p. 213)**
  The result page size.

  **Valid Range:** Minimum value of 1. Maximum value of 250.

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. 213)**

The marker for the next set of results.

Type: String

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

**outgoingCertificates (p. 213)**

The certificates that are being transferred but not yet accepted.

Type: Array of OutgoingCertificate (p. 422) 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. 216)

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

marker (p. 216)

The marker for the next set of results.

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

pageSize (p. 216)

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. 216)

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. 216)**

The descriptions of the policies.

Type: Array of **Policy (p. 424)** 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. 232) instead.

**Request Syntax**

```plaintext
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. 218)
  Specifies the order for results. If true, the results are returned in ascending creation order.

- `marker` (p. 218)
  The marker for the next set of results.

- `pageSize` (p. 218)
  The result page size.


- `policyName` (p. 218)
  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. 218)**

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. 218)**

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.

documentPolicyName (p. 221)

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": [
   {
      "createDate": number,
      "isDefaultVersion": boolean,
      "versionId": "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.

documentPolicyVersions (p. 221)

The policy versions.

Type: Array of PolicyVersion (p. 425) 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. 185) 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. 223)**
  
  Specifies the order for results. If true, results are returned in ascending creation order.

- **marker (p. 223)**
  
  The marker for the next set of results.

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

- **pageSize (p. 223)**
  
  The result page size.


- **principal (p. 223)**
  
  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. 223)*

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. 223)*

The policies.

Type: Array of Policy (p. 424) 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. 226)
The maximum number of results to return in this operation.

nextToken (p. 226)
The token used to get the next set of results, or null if there are no additional results.

principal (p. 226)
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. 226)
The token used to get the next set of results, or null if there are no additional results.
Type: String

things (p. 226)
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. 228)**
  - Return the list of role aliases in ascending alphabetical order.
- **marker (p. 228)**
  - A marker used to get the next set of results.
  - Pattern: `[A-Za-z0-9+/]+={0,2}`
- **pageSize (p. 228)**
  - 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. 228)**
  - A marker used to get the next set of results.
  - Type: String
  - Pattern: `[A-Za-z0-9+/]+={0,2}`
roleAliases (p. 228)

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. 230)**
  
  Set to true to return the list of streams in ascending order.

- **maxResults (p. 230)**
  
  The maximum number of results to return at a time.
  

- **nextToken (p. 230)**
  
  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. 230)**
  
  A token used to get the next set of results.
Type: String

streams (p. 230)

A list of streams.

Type: Array of StreamSummary (p. 441) 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

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

URI Request Parameters
The request requires the following URI parameters.

**marker (p. 232)**
A marker used to get the next set of results.

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

**pageSize (p. 232)**
The maximum number of results to return at one time.

**policyName (p. 232)**
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",
   "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. 232)**
A marker used to get the next set of results.
Type: String

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

**targets (p. 232)**

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**

A limit has been exceeded.

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. 235)**

The maximum number of results to return at one time.


**namePrefixFilter (p. 235)**

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


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

**nextToken (p. 235)**

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

**parentGroup (p. 235)**

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


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

**recursive (p. 235)**

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. 235)

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

Type: String

thingGroups (p. 235)

The thing groups.

Type: Array of GroupNameAndArn (p. 393) 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. 237)

The maximum number of results to return at one time.


nextToken (p. 237)

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

thingName (p. 237)

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. 237)
The token used to get the next set of results, or null if there are no additional results.
Type: String

thingGroups (p. 237)
The thing groups.
Type: Array of GroupNameAndArn (p. 393) 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. 239)**  

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. 239)**  

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. 241)

The maximum number of results to return per request.


nextToken (p. 241)

The token to retrieve the next set of results.

reportType (p. 241)

The type of task report.

Valid Values: ERRORS | RESULTS

taskId (p. 241)

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. 241)

The token to retrieve the next set of results.
Type: String

reportType (p. 241)

The type of task report.
Type: String
Valid Values:  ERRORS  |  RESULTS

resourceLinks (p. 241)

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

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. 244)

The maximum number of results to return at one time.


nextToken (p. 244)

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

status (p. 244)

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

HTTP/1.1 200
Content-type: application/json

{
   "nextToken": "string",
   "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.

nextToken (p. 244)

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

Type: String
**taskIds (p. 244)**

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. 246)**  
  The attribute name used to search for things.  
  Length Constraints: Maximum length of 128.  
  Pattern: [a-zA-Z0-9_.@/:#-]+  

- **attributeValue (p. 246)**  
  The attribute value used to search for things.  
  Length Constraints: Maximum length of 800.  
  Pattern: [a-zA-Z0-9_.@/:#-]*

- **maxResults (p. 246)**  
  The maximum number of results to return in this operation.  

- **nextToken (p. 246)**  
  The token used to get the next set of results, or **null** if there are no additional results.

- **thingTypeName (p. 246)**  
  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. 246)**

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

Type: String

**things (p. 246)**

The things.

Type: Array of [ThingAttribute (p. 442)] 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. 249)

The maximum number of results to return at one time.


nextToken (p. 249)

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

recursive (p. 249)

When true, list things in this thing group and in all child groups as well.

thingGroupName (p. 249)

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. 249)

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

things (p. 249)

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. 251)
The maximum number of results to return in this operation.

**nextToken** (p. 251)
The token for the next set of results, or null if there are no additional results.

**thingTypeName** (p. 251)
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
{
  "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. 251)

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

Type: String

thingTypes (p. 251)

The thing types.

Type: Array of ThingTypeDefinition (p. 449) 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. 254)
The maximum number of results to return.
Valid Range: Minimum value of 1. Maximum value of 10000.

nextToken (p. 254)
A token used to retrieve the next value.

ruleDisabled (p. 254)
Specifies whether the rule is disabled.

topic (p. 254)
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. 254)
A token used to retrieve the next value.
Type: String

rules (p. 254)
The rules.
Type: Array of TopicRuleListitem (p. 454) 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. 256)
The maximum number of results to return at one time.

nextToken (p. 256)
The token used to get the next set of results, or null if there are no additional results.

targetType (p. 256)
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. 256)
   The logging configuration for a target.
   Type: Array of LogTargetConfiguration (p. 416) objects
nextToken (p. 256)
   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. 258)

Allows this CA certificate to be used for auto registration of device certificates.

setAsActive (p. 258)

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. 258)

The CA certificate.

Type: String


Required: Yes

registrationConfig (p. 258)

Information about the registration configuration.

Type: RegistrationConfig (p. 428) object

Required: No

verificationCertificate (p. 258)

The private key verification certificate.
Type: String
Required: Yes

**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. 259)**

The CA certificate ARN.

Type: String

**certificateId (p. 259)**

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**

A limit has been exceeded.
HTTP Status Code: 410
**RegistrationCodeValidationException**

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

```plaintext
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. 261)

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. 261)

The CA certificate used to sign the device certificate being registered.

Type: String


Required: No

certificatePem (p. 261)

The certificate data, in PEM format.

Type: String


Required: Yes

status (p. 261)

The status of the register certificate request.

Type: String

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING_TRANSFER | REGISTER_INACTIVE | PENDING_ACTIVATION
_required: No

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. 262)
  The certificate ARN.
  Type: String
certificateld (p. 262)
  The certificate identifier.
  Type: String
  Length Constraints: Fixed length of 64.
  Pattern: (0x)?[a-fA-F0-9]+

Errors

CertificateConflictException
  Unable to verify the CA certificate used to sign the device certificate you are attempting to register. This 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. 264)

The parameters for provisioning a thing. See Programmatic Provisioning for more information.

Type: String to string map

Required: No

templateBody (p. 264)

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. 264)**

The PEM of a certificate.

Type: String


**resourceArns (p. 264)**

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 (p. 194) 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. 267)

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-zA-F0-9]+

Request Body

The request accepts the following data in JSON format.

rejectReason (p. 267)

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

```http
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.

**thingArn** (p. 269)

The ARN of the thing to remove from the group.

Type: String

Required: No

**thingGroupArn** (p. 269)

The group ARN.

Type: String

Required: No

**thingGroupName** (p. 269)

The group name.

Type: String


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

Required: No

**thingName** (p. 269)

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": {
  }
}
"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"
}

URI Request Parameters

The request requires the following URI parameters.
**ruleName (p. 271)**

The name of the rule.


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

**Request Body**

The request accepts the following data in JSON format.

**topicRulePayload (p. 271)**

The rule payload.

Type: TopicRulePayload (p. 455) 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. 276)

The search index name.
Type: String
Pattern: [a-zA-Z0-9_:—]+
Required: No

maxResults (p. 276)

The maximum number of results to return at one time.
Type: Integer
Required: No

nextToken (p. 276)

The token used to get the next set of results, or null if there are no additional results.
Type: String
Required: No

queryString (p. 276)

The search query string.
Type: String

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

Required: Yes

**queryVersion (p. 276)**

The query version.

Type: String

Required: No

### Response Syntax

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

{
  "nextToken": "string",
  "things": [
    {
      "attributes": {
        "string": "string"
      },
      "shadow": "string",
      "thingGroupName": [ "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. 277)**

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

Type: String

**things (p. 277)**

The things that match the search query.

Type: Array of [ThingDocument (p. 444)] 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

Service: AWS IoT

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. 279)**

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. 279)**

The authorizer ARN.

Type: String
**authorizedName (p. 279)**

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

**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
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. 282)**

The policy name.


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

**policyVersionId (p. 282)**

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. 284)

   The logging options payload.
   Type: LoggingOptionsPayload (p. 414) 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

```plaintext
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. 286)
The log level.
Type: String
Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED
Required: Yes

`logTarget` (p. 286)
The log target.
Type: LogTarget (p. 415) 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

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. 288)

The default logging level.

Type: String

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

Required: No

disableAllLogs (p. 288)

Set to true to disable all logs, otherwise set to false.

Type: Boolean

Required: No

roleArn (p. 288)

The role ARN that allows IoT to write to Cloudwatch logs.

Type: String

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

**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

```plaintext
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. 290)

The S3 bucket that contains the input file.

Type: String


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

Required: Yes

inputFileKey (p. 290)

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. 290)

The IAM role ARN that grants permission the input file.

Type: String


Required: Yes
**templateBody (p. 290)**

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. 291)**

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. 293)
- 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

Tests if a specified principal is authorized to perform an AWS IoT action on a specified resource. Use this to test and debug the authorization behavior of devices that connect to the AWS IoT device gateway.

Request Syntax

```json
POST /test-authorization?clientId=clientId HTTP/1.1
Content-type: application/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. 295)**

The MQTT client ID.

Request Body

The request accepts the following data in JSON format.

**authInfos (p. 295)**

A list of authorization info objects. Simulating authorization will create a response for each authInfo object in the list.

Type: Array of AuthInfo (p. 363) objects

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

Required: Yes

**cognitoIdentityPoolId (p. 295)**

The Cognito identity pool ID.

Type: String

Required: No

**policyNamesToAdd (p. 295)**

When testing custom authorization, the policies specified here are treated as if they are attached to the principal being authorized.
TestAuthorization

Type: Array of strings


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

Required: No

policyNamesToSkip (p. 295)

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

Required: No

principal (p. 295)

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. 296)

The authentication results.

Type: Array of AuthResult (p. 367) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

LimitExceededException

A limit has been exceeded.

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

Tests a custom authorization behavior by invoking a specified custom authorizer. Use this to test and debug the custom authorization behavior of devices that connect to the AWS IoT device gateway.

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. 299)**

The custom authorizer name.


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

Request Body

The request accepts the following data in JSON format.

**token (p. 299)**

The token returned by your custom authentication service.

Type: String


Required: Yes

**tokenSignature (p. 299)**

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. 299)

   The number of seconds after which the connection is terminated.

   Type: Integer

isAuthenticated (p. 299)

   True if the token is authenticated, otherwise false.

   Type: Boolean

policyDocuments (p. 299)

   IAM policy documents.

   Type: Array of strings

principalId (p. 299)

   The principal ID.

   Type: String


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

refreshAfterInSeconds (p. 299)

   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. 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]+

targetAwsAccount (p. 302)

  The AWS account.

  Pattern: [0-9]{12}

Request Body

The request accepts the following data in JSON format.

transferMessage (p. 302)

  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. 303)**

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. 305)**

The authorizer name.


Pattern: [\w=,@-]+

Request Body

The request accepts the following data in JSON format.

**authorizerFunctionArn (p. 305)**

The ARN of the authorizer's Lambda function.

Type: String

Required: No

**status (p. 305)**

The status of the update authorizer request.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

**tokenKeyName (p. 305)**

The key used to extract the token from the HTTP headers.

Type: String

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

tokenSigningPublicKeys (p. 305)

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. 306)

The authorizer ARN.

Type: String

authorizerName (p. 306)

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
A limit has been exceeded.
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**

```
PUT /cacertificate/caCertificateId?
newAutoRegistrationStatus=newAutoRegistrationStatus&newStatus=newStatus
HTTP/1.1
Content-type: application/json

{
    "registrationConfig": {
        "roleArn": "string",
        "templateBody": "string"
    },
    "removeAutoRegistration": boolean
}
```

**URI Request Parameters**

The request requires the following URI parameters.

1. **certificateId (p. 308)**
   - The CA certificate identifier.
   - Length Constraints: Fixed length of 64.
   - Pattern: (0x)?[a-fA-F0-9]+

2. **newAutoRegistrationStatus (p. 308)**
   - The new value for the auto registration status. Valid values are: "ENABLE" or "DISABLE".
   - Valid Values: ENABLE | DISABLE

3. **newStatus (p. 308)**
   - 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.

1. **registrationConfig (p. 308)**
   - Information about the registration configuration.
   - Type: RegistrationConfig (p. 428) object
   - Required: No

2. **removeAutoRegistration (p. 308)**
   - 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 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. 311)

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. 311)

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. 313)*

The new event configuration values.

Type: String to *Configuration (p. 382)* 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. 315)
    Thing indexing configuration.
    Type: ThingIndexingConfiguration (p. 448) 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. 317)
  The role alias to update.
  Pattern: [\w=,@-]+

Request Body

The request accepts the following data in JSON format.

credentialDurationSeconds (p. 317)
  The number of seconds the credential will be valid.
  Type: Integer
  Required: No

roleArn (p. 317)
  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. 317)**

The role alias.

Type: String


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

**roleAliasArn (p. 317)**

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

```json
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. 320)**

The stream ID.


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

Request Body

The request accepts the following data in JSON format.

**description (p. 320)**

The description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

Required: No

**files (p. 320)**

The files associated with the stream.

Type: Array of StreamFile (p. 438) objects
Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: No

**roleArn (p. 320)**

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. 321)**

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

**streamArn (p. 321)**

The stream ARN.

Type: String

**streamId (p. 321)**

The stream ID.

Type: String


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

**streamVersion (p. 321)**

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. 323)

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. 323)

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. 362) object

Required: No

expectedVersion (p. 323)

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. 323)
  Remove a thing type association. If true, the association is removed.
  Type: Boolean
  Required: No

thingTypeName (p. 323)
  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. 326)**

The thing group to update.

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

Request Body

The request accepts the following data in JSON format.

**expectedVersion (p. 326)**

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. 326)**

The thing group properties.

- Type: ThingGroupProperties (p. 447) 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. 326)**

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. 329)**

The groups to which the thing will be added.

Type: Array of strings


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

Required: No

**thingGroupsToRemove (p. 329)**

The groups from which the thing will be removed.

Type: Array of strings


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

Required: No

**thingName (p. 329)**

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. 332)
- GetThingShadow (p. 334)
• Publish (p. 336)
• UpdateThingShadow (p. 338)
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. 332)**

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. 332)**

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. 334)
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. 334)
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

```
POST /topics/topic?qos=qos HTTP/1.1
payload
```

URI Request Parameters

The request requires the following URI parameters.

- `qos` (p. 336)
  - The Quality of Service (QoS) level.
  - Valid Range: Minimum value of 0. Maximum value of 1.

- `topic` (p. 336)
  - The name of the MQTT topic.

Request Body

The request accepts the following binary data.

- `payload` (p. 336)
  - The state information, in JSON format.

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

**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. 338)**

The name of the thing.

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

Request Body

The request accepts the following binary data.

**payload (p. 338)**

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. 338)**

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
AWS IoT Jobs Data Plane

The following actions are supported by AWS IoT Jobs Data Plane:

- DescribeJobExecution (p. 341)
- GetPendingJobExecutions (p. 344)
- StartNextPendingJobExecution (p. 347)
- UpdateJobExecution (p. 350)
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. 341)**

Optional. A number that identifies a particular job execution on a particular device. If not specified, the latest job execution is returned.

**includeJobDocument (p. 341)**

Optional. When set to true, the response contains the job document. The default is false.

**jobId (p. 341)**

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

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

**thingName (p. 341)**

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",
   }
}
```
"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. 341)

Contains data about a job execution.

Type: JobExecution (p. 459) 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. 344)**

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

```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. 344)**
A list of JobExecutionSummary objects with status IN_PROGRESS.
Type: Array of JobExecutionSummary (p. 462) objects

**queuedJobs (p. 344)**
A list of JobExecutionSummary objects with status QUEUED.
Type: Array of JobExecutionSummary (p. 462) objects

**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
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. 347)**

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. 347)**

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. 347)**

A JobExecution object.

Type: JobExecution (p. 459) 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. 350)

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-_]+

thingName (p. 350)

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. 350)

Optional. A number that identifies a particular job execution on a particular device.
Type: Long
Required: No

expectedVersion (p. 350)

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

350
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. 350)
Optional. When set to true, the response contains the job document. The default is false.
Type: Boolean
Required: No

includeJobExecutionState (p. 350)
Optional. When included and set to true, the response contains the JobExecutionState data. The default is false.
Type: Boolean
Required: No

status (p. 350)
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. 350)
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

```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. 351)**

A JobExecutionState object.

Type: JobExecutionState (p. 461) object

**jobDocument (p. 351)**

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. 358)
- Allowed (p. 361)
- AttributePayload (p. 362)
- AuthInfo (p. 363)
- AuthorizerDescription (p. 364)
- AuthorizerSummary (p. 366)
- AuthResult (p. 367)
- CACertificate (p. 368)
- CACertificateDescription (p. 369)
- Certificate (p. 371)
- CertificateDescription (p. 372)
- CertificateValidity (p. 375)
- CloudwatchAlarmAction (p. 376)
- CloudwatchMetricAction (p. 377)
- CodeSigning (p. 379)
- CodeSigningCertificateChain (p. 380)
- CodeSigningSignature (p. 381)
- Configuration (p. 382)
- CustomCodeSigning (p. 383)
- Denied (p. 384)
- DynamoDBAction (p. 385)
- DynamoDBv2Action (p. 387)
- EffectivePolicy (p. 388)
- ElasticsearchAction (p. 389)
- ErrorInfo (p. 390)
- ExplicitDeny (p. 391)
- FirehoseAction (p. 392)
- GroupNameAndArn (p. 393)
- ImplicitDeny (p. 394)
- IotAnalyticsAction (p. 395)
- Job (p. 396)
- JobExecution (p. 399)
- JobExecutionsRolloutConfig (p. 401)
- JobExecutionStatusDetails (p. 402)
- JobExecutionSummary (p. 403)
- JobExecutionSummaryForJob (p. 405)
- JobExecutionSummaryForThing (p. 406)
- JobProcessDetails (p. 407)
- JobSummary (p. 409)
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. 358)
- Allowed (p. 361)
- AttributePayload (p. 362)
- AuthInfo (p. 363)
- AuthorizerDescription (p. 364)
- AuthorizerSummary (p. 366)
- AuthResult (p. 367)
- CACertificate (p. 368)
- CACertificateDescription (p. 369)
- Certificate (p. 371)
- CertificateDescription (p. 372)
- CertificateValidity (p. 375)
- CloudwatchAlarmAction (p. 376)
- CloudwatchMetricAction (p. 377)
- CodeSigning (p. 379)
- CodeSigningCertificateChain (p. 380)
- CodeSigningSignature (p. 381)
- Configuration (p. 382)
- CustomCodeSigning (p. 383)
- Denied (p. 384)
- DynamoDBAction (p. 385)
- DynamoDBv2Action (p. 387)
- EffectivePolicy (p. 388)
- ElasticsearchAction (p. 389)
- ErrorInfo (p. 390)
- ExplicitDeny (p. 391)
- FirehoseAction (p. 392)
- GroupNameAndArn (p. 393)
- ImplicitDeny (p. 394)
- IotAnalyticsAction (p. 395)
- Job (p. 396)
- JobExecution (p. 399)
- JobExecutionsRolloutConfig (p. 401)
- JobExecutionStatusDetails (p. 402)
- JobExecutionSummary (p. 403)
- JobExecutionSummaryForJob (p. 405)
- JobExecutionSummaryForThing (p. 406)
- JobProcessDetails (p. 407)
- JobSummary (p. 409)
- KeyPair (p. 411)
- KinesisAction (p. 412)
- LambdaAction (p. 413)
• LoggingOptionsPayload (p. 414)
• LogTarget (p. 415)
• LogTargetConfiguration (p. 416)
• OTAUpdateFile (p. 417)
• OTAUpdateInfo (p. 418)
• OTAUpdateSummary (p. 421)
• OutgoingCertificate (p. 422)
• Policy (p. 424)
• PolicyVersion (p. 425)
• PresignedUrlConfig (p. 426)
• PutItemInput (p. 427)
• RegistrationConfig (p. 428)
• RepublishAction (p. 429)
• RoleAliasDescription (p. 430)
• S3Action (p. 432)
• S3Location (p. 433)
• SalesforceAction (p. 434)
• SnsAction (p. 435)
• SqsAction (p. 436)
• Stream (p. 437)
• StreamFile (p. 438)
• StreamInfo (p. 439)
• StreamSummary (p. 441)
• ThingAttribute (p. 442)
• ThingDocument (p. 444)
• ThingGroupMetadata (p. 446)
• ThingGroupProperties (p. 447)
• ThingIndexingConfiguration (p. 448)
• ThingTypeDefinition (p. 449)
• ThingTypeMetadata (p. 450)
• ThingTypeProperties (p. 451)
• TopicRule (p. 452)
• TopicRuleListItem (p. 454)
• TopicRulePayload (p. 455)
• TransferData (p. 457)
Action
Service: AWS IoT

Describes the actions associated with a rule.

Contents

cloudwatchAlarm
Change the state of a CloudWatch alarm.
Type: CloudwatchAlarmAction (p. 376) object
Required: No

cloudwatchMetric
Capture a CloudWatch metric.
Type: CloudwatchMetricAction (p. 377) object
Required: No

dynamoDB
Write to a DynamoDB table.
Type: DynamoDBAction (p. 385) 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. 387) object
Required: No

elasticsearch
Write data to an Amazon Elasticsearch Service domain.
Type: ElasticsearchAction (p. 389) object
Required: No

firehose
Write to an Amazon Kinesis Firehose stream.
Type: FirehoseAction (p. 392) object
Required: No

iotAnalytics
Sends message data to an AWS IoT Analytics channel.
Type: iotAnalyticsAction (p. 395) object
Required: No
**kinesis**

Write data to an Amazon Kinesis stream.

Type: `KinesisAction (p. 412)` object

Required: No

**lambda**

Invoke a Lambda function.

Type: `LambdaAction (p. 413)` object

Required: No

**republis**

Publish to another MQTT topic.

Type: `RepublishAction (p. 429)` object

Required: No

**s3**

Write to an Amazon S3 bucket.

Type: `S3Action (p. 432)` object

Required: No

**salesforce**

Send a message to a Salesforce IoT Cloud Input Stream.

Type: `SalesforceAction (p. 434)` object

Required: No

**sns**

Publish to an Amazon SNS topic.

Type: `SnsAction (p. 435)` object

Required: No

**sqs**

Publish to an Amazon SQS queue.

Type: `SqsAction (p. 436)` 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. 424) 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:

```json
{"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
AuthorizerDescription
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.
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. 361) 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. 363) object

Required: No

denied

The policies and statements that denied the specified action.

Type: Denied (p. 384) 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: \( [0-9a-fA-F0-9]+ \)
  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

**customerVersion**

The customer version of the CA certificate.

Type: Integer

Valid Range: Minimum value of 1.
Required: No

generationId

The generation ID of the CA certificate.
Type: String
Required: No

lastModifiedDate

The date the CA certificate was last modified.
Type: Timestamp
Required: No

ownedBy

The owner of the CA certificate.
Type: String
Pattern: [0-9]{12}
Required: No

status

The status of a CA certificate.
Type: String
Valid Values: ACTIVE | INACTIVE
Required: No

validity

Type: CertificateValidity (p. 375) 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
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

customerVersion

The customer version of the certificate.

Type: Integer

Valid Range: Minimum value of 1.
Required: No

generationId

The generation ID of the certificate.
Type: String
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. 457) object
Required: No

validity

Type: CertificateValidity (p. 375) 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
CertificateValidity
Service: AWS IoT

Contents

notAfter
Type: Timestamp
Required: No

notBefore
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
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. 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
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. 437) 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. 437) 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. 380) 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. 381) 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. 391) 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. 394) 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:

```json
{  "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. 427) 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

dolicyArn
The policy ARN.
Type: String
Required: No
document
The IAM policy document.
Type: String
Required: No
document
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. 424) 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), \r\n (Windows newline), ', (comma).
  Type: String
  Pattern: ([\n\t])|([\r\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. 424) 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: `[a-zA-Z0-9\-\:_.]+`  

Required: No
forceCanceled
Type: Boolean
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. 401) 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. 407) 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. 426) object
Required: No

status
The status of the job, one of IN_PROGRESS, CANCELED, or COMPLETED.
Type: String
Valid Values: IN_PROGRESS | CANCELED | COMPLETED | DELETION_IN_PROGRESS
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

forceCanceled
Type: Boolean
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. 402) object

Required: No

thingArn

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

Type: String

Required: No

versionNumber

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
JobExecutionsRolloutConfig

Service: AWS IoT

Allows you to create a staged rollout of a job.

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. 403) 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. 403) 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 target devices to which the job execution is being rolled out. This value will be null after the job execution has finished rolling out to all the target devices.

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 | DELETION_IN_PROGRESS
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
LoggingOptionsPayload

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. 415) 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. 379) object
Required: No

fileName
The name of the file.
Type: String
Required: No

fileSource
The source of the file.
Type: Stream (p. 437) 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. 390) 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 (p. 417) objects

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

Required: No

otaUpdatedId

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-fA-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

roleAliasArn
The ARN of the role alias.
Type: String
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 https://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. 433) 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. 438) 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.
StreamInfo

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

current

The current version of the thing record in the registry.

Type: Long

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_-,@/:#-]+

Value Length Constraints: Maximum length of 800.

Value Pattern: [a-zA-Z0-9_-,@/:#-]*

Required: No

**shadow**

The shadow.

Type: String

Required: No

**thingGroupNames**

Thing group names.

Type: Array of strings


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

Required: No

**thingId**

The thing ID.

Type: String

Required: No

**thingName**

The thing name.

Type: String


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

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. 393) 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. 362) 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. 450) 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. 451) 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

description
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. 358)] 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. 358) 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. 358) 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. 358) 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. 459)
- JobExecutionState (p. 461)
- JobExecutionSummary (p. 462)
**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".
JobExecution

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", "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

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 IoT API Reference
JobExecutionSummary

- 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.

For more information, see Task 2: Create a String to Sign 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

**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