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Welcome

AWS IoT

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

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

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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- AddThingToThingGroup (p. 14)
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• UpdateAuthorizer (p. 399)
• UpdateBillingGroup (p. 402)
• UpdateCACertificate (p. 405)
• UpdateCertificate (p. 408)
• UpdateDynamicThingGroup (p. 410)
• UpdateEventConfigurations (p. 413)
• UpdateIndexingConfiguration (p. 415)
• UpdateJob (p. 417)
• UpdateRoleAlias (p. 420)
• UpdateScheduledAudit (p. 423)
• UpdateSecurityProfile (p. 426)
• UpdateStream (p. 431)
• UpdateThing (p. 434)
• UpdateThingGroup (p. 437)
• UpdateThingGroupsForThing (p. 440)
• ValidateSecurityProfileBehaviors (p. 443)
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. 260) 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. 10)

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. 10)

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
AddThingToBillingGroup
Service: AWS IoT

Adds a thing to a billing group.

Request Syntax

```
PUT /billing-groups/addThingToBillingGroup HTTP/1.1
Content-type: application/json

{
    "billingGroupArn": "string",
    "billingGroupName": "string",
    "thingArn": "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.

**billingGroupArn (p. 12)**

The ARN of the billing group.

Type: String

Required: No

**billingGroupName (p. 12)**

The name of the billing group.

Type: String


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

Required: No

**thingArn (p. 12)**

The ARN of the thing to be added to the billing group.

Type: String

Required: No

**thingName (p. 12)**

The name of the thing to be added to the billing group.

Type: String

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 Go - Pilot
- 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**

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

{
    "overrideDynamicGroups": boolean,
    "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.

*overrideDynamicGroups (p. 14)*

Override dynamic thing groups with static thing groups when 10-group limit is reached. If a thing belongs to 10 thing groups, and one or more of those groups are dynamic thing groups, adding a thing to a static group removes the thing from the last dynamic group.

Type: Boolean

Required: No

*thingArn (p. 14)*

The ARN of the thing to add to a group.

Type: String

Required: No

*thingGroupArn (p. 14)*

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

Type: String

Required: No

*thingGroupName (p. 14)*

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

Type: String


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

Required: No

**thingName (p. 14)**

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
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- 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. 17)**

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. 17)**

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. 17)**

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. 18)

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

jobArn (p. 18)

  An ARN identifying the job.
  Type: String

jobId (p. 18)

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

Errors

InvalidRequestException

  The request is not valid.
  HTTP Status Code: 400

LimitExceededException

  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 Go - Pilot](#)
- [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. 20)**

The name of the policy to attach.


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

**Request Body**

The request accepts the following data in JSON format.

**target (p. 20)**

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 Go - Pilot
- 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. 20) 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. 22)**
  
  The policy name.


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

- **principal (p. 22)**
  
  The principal, which can be a certificate ARN (as returned from the CreateCertificate operation) or an Amazon Cognito ID.

#### Request Body

The request does not have a request body.

#### Response Syntax

```
HTTP/1.1 200
```

#### Response Elements

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

#### Errors

- **InternalFailureException**
  
  An unexpected error has occurred.

  HTTP Status Code: 500

- **InvalidRequestException**
  
  The request is not valid.

  HTTP Status Code: 400
LimitExceeded Exception
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
AttachSecurityProfile

Service: AWS IoT

Associates a Device Defender security profile with a thing group or with this account. Each thing group or account can have up to five security profiles associated with it.

Request Syntax

PUT /security-profiles/{securityProfileName}/targets?
securityProfileTargetArn={securityProfileTargetArn} HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

securityProfileName (p. 24)

- The security profile that is attached.
- Pattern: [a-zA-Z0-9_:\-]+

securityProfileTargetArn (p. 24)

- The ARN of the target (thing group) to which the security profile is attached.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

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

InvalidRequestException

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

LimitExceeded

A limit has been exceeded.
HTTP Status Code: 410

**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 an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

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 Go - Pilot
- 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. A principal can be X.509 certificates, IAM users, groups, and roles, Amazon Cognito identities or federated identities.

**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. 26)**
  - The principal, such as a certificate or other credential.
- **thingName (p. 26)**
  - 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CancelAuditTask
Service: AWS IoT

Cancels an audit that is in progress. The audit can be either scheduled or on-demand. If the audit is not in progress, an "InvalidRequestException" occurs.

Request Syntax

PUT /audit/tasks/taskId/cancel HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

taskId (p. 28)

The ID of the audit you want to cancel. You can only cancel an audit that is "IN_PROGRESS".


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

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 Go - Pilot
- 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` 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. 30)

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

Request Syntax

```
PUT /jobs/jobId/cancel?force=force HTTP/1.1
Content-type: application/json
{
    "comment": "string",
    "reasonCode": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

force (p. 32)

(Optional) If `true` job executions with status "IN_PROGRESS" and "QUEUED" are canceled, otherwise only job executions with status "QUEUED" are canceled. The default is `false`.

Canceling a job which is "IN_PROGRESS", will cause a device which is executing the job to be unable to update the job execution status. Use caution and ensure that each device executing a job which is canceled is able to recover to a valid state.

jobId (p. 32)

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. 32)

An optional comment string describing why the job was canceled.

Type: String

Length Constraints: Maximum length of 2028.

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

Required: No

reasonCode (p. 32)

(Optional) A reason code string that explains why the job was canceled.

Type: String

Length Constraints: Maximum length of 128.
Pattern: [\p{Upper}\p{Digit}\_]+  
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. 33)  
A short text description of the job.  
Type: String  
Length Constraints: Maximum length of 2028.  
Pattern: [^\p{C}]+

jobArn (p. 33)  
The job ARN.  
Type: String

jobId (p. 33)  
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 Go - Pilot
- 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

Cancels the execution of a job for a given thing.

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. 35)
(Optional) If true the job execution will be canceled if it has status IN_PROGRESS or QUEUED, otherwise the job execution will be canceled only if it has status QUEUED. If you attempt to cancel a job execution that is IN_PROGRESS, and you do not set force to true, then an InvalidStateTransitionException will be thrown. The default is false.

jobId (p. 35)
The ID of the job to be canceled.
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [a-zA-Z0-9_\-]+

thingName (p. 35)
The name of the thing whose execution of the job will be canceled.
Pattern: [a-zA-Z0-9:\-\_]+

Request Body

The request accepts the following data in JSON format.

expectedVersion (p. 35)
(Optional) The expected current version of the job execution. Each time you update the job execution, its version is incremented. If the version of the job execution stored in Jobs does not match, the update is rejected with a VersionMismatch error, and an ErrorResponse that contains the current job execution status data is returned. (This makes it unnecessary to perform a separate DescribeJobExecution request in order to obtain the job execution status data.)
Type: Long
Required: No

**statusDetails (p. 35)**
A collection of name/value pairs that describe the status of the job execution. If not specified, the statusDetails are unchanged. You can specify at most 10 name/value pairs.

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

**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 an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

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 Go - Pilot
- 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 Go - Pilot
- 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. 40)**

The authorizer name.


Pattern: [\w=,@-]+

Request Body

The request accepts the following data in JSON format.

**authorizerFunctionArn (p. 40)**

The ARN of the authorizer's Lambda function.

Type: String

Required: Yes

**status (p. 40)**

The status of the create authorizer request.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

**tokenKeyName (p. 40)**

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. 40)
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. 41)
The authorizer ARN.
Type: String

authorizerName (p. 41)
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

LimitExceeded Exception
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateBillingGroup

Service: AWS IoT

Creates a billing group.

Request Syntax

POST /billing-groups/<billingGroupName> HTTP/1.1
Content-type: application/json

{  
   "billingGroupProperties": {  
      "billingGroupDescription": "string"  
   },  
   "tags": [  
      {  
         "Key": "string",  
         "Value": "string"  
      }  
   ]
}

URI Request Parameters

The request requires the following URI parameters.

billingGroupName (p. 43)

The name you wish to give to the billing group.


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

Request Body

The request accepts the following data in JSON format.

billingGroupProperties (p. 43)

The properties of the billing group.

Type: BillingGroupProperties (p. 502) object

Required: No

tags (p. 43)

Metadata which can be used to manage the billing group.

Type: Array of Tag (p. 599) objects

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

```json
{
  "billingGroupArn": "string",
  "billingGroupId": "string",
  "billingGroupName": "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.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
<th>Type</th>
<th>Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>billingGroupArn (p. 43)</td>
<td>The ARN of the billing group.</td>
<td>String</td>
<td></td>
</tr>
<tr>
<td>billingGroupId (p. 43)</td>
<td>The ID of the billing group.</td>
<td>String</td>
<td>Length: 1-128, Pattern: <code>[a-zA-Z0-9\-]+</code></td>
</tr>
<tr>
<td>billingGroupName (p. 43)</td>
<td>The name you gave to the billing group.</td>
<td>String</td>
<td>Length: 1-128, Pattern: <code>[a-zA-Z0-9\-:_\-]+</code></td>
</tr>
</tbody>
</table>

## Errors

<table>
<thead>
<tr>
<th>Error</th>
<th>Description</th>
<th>HTTP Status Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>InternalFailureException</td>
<td>An unexpected error has occurred.</td>
<td>500</td>
</tr>
<tr>
<td>InvalidRequestException</td>
<td>The request is not valid.</td>
<td>400</td>
</tr>
<tr>
<td>ResourceAlreadyExistsException</td>
<td>The resource already exists.</td>
<td>409</td>
</tr>
<tr>
<td>ThrottlingException</td>
<td>The rate exceeds the limit.</td>
<td></td>
</tr>
</tbody>
</table>
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 Go - Pilot
- 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**

```
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. 46)**

Specifies whether the certificate is active.
Request Body

The request accepts the following data in JSON format.

**certificateSigningRequest (p. 46)**

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. 47)**

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

Type: String

**certificateId (p. 47)**

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

Type: String

Length Constraints: Fixed length of 64.

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

**certificatePem (p. 47)**

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateDynamicThingGroup
Service: AWS IoT

Creates a dynamic thing group.

Request Syntax

```
POST /dynamic-thing-groups/{thingGroupName} HTTP/1.1
Content-type: application/json

{
  "indexName": "string",
  "queryString": "string",
  "queryVersion": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "thingGroupProperties": {
    "attributePayload": {
      "attributes": {
        "string": "string"
      },
      "merge": boolean
    },
    "thingGroupDescription": "string"
  }
}
```

URI Request Parameters

The request requires the following URI parameters.

thingGroupName (p. 49)

The dynamic thing group name to create.


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

Request Body

The request accepts the following data in JSON format.

indexName (p. 49)

The dynamic thing group index name.

Note
Currently one index is supported: "AWS_Things".

Type: String


Pattern: [a-zA-Z0-9:_-]+
**queryString (p. 49)**

The dynamic thing group search query string.

See [Query Syntax](#) for information about query string syntax.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**queryVersion (p. 49)**

The dynamic thing group query version.

**Note**

Currently one query version is supported: "2017-09-30". If not specified, the query version defaults to this value.

Type: String

Required: No

**tags (p. 49)**

Metadata which can be used to manage the dynamic thing group.

Type: Array of [Tag](#) objects

Required: No

**thingGroupProperties (p. 49)**

The dynamic thing group properties.

Type: [ThingGroupProperties](#) object

Required: No

## Response Syntax

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

{
   "indexName": "string",
   "queryString": "string",
   "queryVersion": "string",
   "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.
indexName (p. 50)

The dynamic thing group index name.

Type: String


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

queryString (p. 50)

The dynamic thing group search query string.

Type: String

Length Constraints: Minimum length of 1.

queryVersion (p. 50)

The dynamic thing group query version.

Type: String

thingGroupArn (p. 50)

The dynamic thing group ARN.

Type: String

thingGroupId (p. 50)

The dynamic thing group ID.

Type: String


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

thingGroupName (p. 50)

The dynamic thing group name.

Type: String


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

Errors

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

LimitExceededException
   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

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 Go - Pilot
- 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

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

{
  "abortConfig": {
    "criteriaList": [
      {
        "action": "string",
        "failureType": "string",
        "minNumberOfExecutedThings": number,
        "thresholdPercentage": number
      }
    ],
  
  "description": "string",
  "document": "string",
  "documentSource": "string",
  "jobExecutionsRolloutConfig": {
    "exponentialRate": {
      "baseRatePerMinute": number,
      "incrementFactor": number,
      "rateIncreaseCriteria": {
        "numberOfNotifiedThings": number,
        "numberOfSucceededThings": number
      }
    },
    "maximumPerMinute": number
  },
  "presignedUrlConfig": {
    "expiresInSec": number,
    "roleArn": "string"
  },
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "targets": [ "string" ],
  "targetSelection": "string",
  "timeoutConfig": {
    "inProgressTimeoutInMinutes": number
  }
}
```

URI Request Parameters

The request requires the following URI parameters.

**jobId (p. 53)**

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.
Request Body

The request accepts the following data in JSON format.

abortConfig (p. 53)

Allows you to create criteria to abort a job.

Type: AbortConfig (p. 474) object

Required: No

description (p. 53)

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

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

Required: No

document (p. 53)

The job document.

Note

If the job document resides in an S3 bucket, you must use a placeholder link when specifying the document. The placeholder link is of the following form:

${aws:iot:s3-presigned-url:https://s3.amazonaws.com/bucket/key}

where bucket is your bucket name and key is the object in the bucket to which you are linking.

Type: String

Length Constraints: Maximum length of 32768.

Required: No

documentSource (p. 53)

An S3 link to the job document.

Type: String


Required: No

jobExecutionsRolloutConfig (p. 53)

Allows you to create a staged rollout of the job.

Type: JobExecutionsRolloutConfig (p. 540) object

Required: No

presignedUrlConfig (p. 53)

Configuration information for pre-signed S3 URLs.
Type: PresignedUrlConfig (p. 568) object
Required: No

tags (p. 53)
Metadata which can be used to manage the job.
Type: Array of Tag (p. 599) objects
Required: No

targets (p. 53)
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. 53)
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
timeoutConfig (p. 53)
Specifies the amount of time each device has to finish its execution of the job. The timer is started when the job execution status is set to IN_PROGRESS. If the job execution status is not set to another terminal state before the time expires, it will be automatically set to TIMED_OUT.
Type: TimeoutConfig (p. 616) object
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. 55)  
The job description.
Type: String  
Length Constraints: Maximum length of 2028.
Pattern: \^[^\p{C}]+  

jobArn (p. 55)  
The job ARN.
Type: String  

jobId (p. 55)  
The unique identifier you assigned to this job.
Type: String  
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [a-zA-Z0-9_\-\"]+

Errors

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

LimitExceededException  
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 Go - Pilot
- 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. 58)

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. 58)

The ARN of the certificate.

Type: String

certificateId (p. 58)

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. 58)**

The certificate data, in PEM format.

Type: String


**keyPair (p. 58)**

The generated key pair.

Type: KeyPair (p. 550) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateOTAUpdate
Service: AWS IoT

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

Request Syntax

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

{
    "additionalParameters": {
        "string" : "string"
    },
    "awsJobExecutionsRolloutConfig": {
        "maximumPerMinute": number
    },
    "description": "string",
    "files": [
        {
            "attributes": {
                "string" : "string"
            },
            "codeSigning": {
                "awsSignerJobId": "string",
                "customCodeSigning": {
                    "certificateChain": {
                        "certificateName": "string",
                        "inlineDocument": "string"
                    },
                    "hashAlgorithm": "string",
                    "signature": {
                        "inlineDocument": blob
                    },
                    "signatureAlgorithm": "string"
                },
                "startSigningJobParameter": {
                    "destination": {
                        "s3Destination": {
                            "bucket": "string",
                            "prefix": "string"
                        }
                    },
                    "signingProfileName": "string",
                    "signingProfileParameter": {
                        "certificateArn": "string",
                        "certificatePathOnDevice": "string",
                        "platform": "string"
                    }
                }
            },
            "fileLocation": {
                "s3Location": {
                    "bucket": "string",
                    "key": "string",
                    "version": "string"
                },
                "stream": {
                    "fileId": number,
                    "streamId": "string"
                }
            },
            "fileName": "string"
        }
    ]
}
```
"FileVersion": "string"
],
"roleArn": "string",
"tags": [
    
    "Key": "string",
    "Value": "string"
  
  
],
"targets": [ "string" ],
"targetSelection": "string"
}

**URI Request Parameters**

The request requires the following URI parameters.

**otaUpdateId (p. 61)**

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. 61)**

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

Type: String to string map

Required: No

**awsJobExecutionsRolloutConfig (p. 61)**

Configuration for the rollout of OTA updates.

Type: `AwsJobExecutionsRolloutConfig (p. 497)` object

Required: No

**description (p. 61)**

The description of the OTA update.

Type: String

Length Constraints: Maximum length of 2028.

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

Required: No

**files (p. 61)**

The files to be streamed by the OTA update.

Type: Array of `OTAUpdateFile (p. 558)` objects
Array Members: Minimum number of 1 item. Maximum number of 50 items.

Required: Yes

**roleArn (p. 61)**

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

Type: String


Required: Yes

**tags (p. 61)**

Metadata which can be used to manage updates.

Type: Array of Tag (p. 599) objects

Required: No

**targets (p. 61)**

The targeted devices to receive OTA updates.

Type: Array of strings

Array Members: Minimum number of 1 item.

Required: Yes

**targetSelection (p. 61)**

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

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

Required: No

**Response Syntax**

HTTP/1.1 200
Content-type: application/json

```
{
    "awsIotJobArn": "string",
    "awsIotJobId": "string",
    "otaUpdateArn": "string",
    "otaUpdateId": "string",
    "otaUpdateStatus": "string"
}
```

**Response Elements**

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

**awsIotJobArn (p. 63)**

The AWS IoT job ARN associated with the OTA update.

Type: String

**awsIotJobId (p. 63)**

The AWS IoT job ID associated with the OTA update.

Type: String

**otaUpdateArn (p. 63)**

The OTA update ARN.

Type: String

**otaUpdateId (p. 63)**

The OTA update ID.

Type: String


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

**otaUpdateStatus (p. 63)**

The OTA update status.

Type: String

Valid Values: CREATE_PENDING | CREATE_IN_PROGRESS | CREATE_COMPLETE | CREATE_FAILED

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**LimitExceededException**

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

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 Go - Pilot
- 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. 66)
   The policy name.
   Pattern: [\w+=,.@-]+

Request Body

The request accepts the following data in JSON format.

policyDocument (p. 66)
   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. 66)**

The policy ARN.

Type: String

**policyDocument (p. 66)**

The JSON document that describes the policy.

Type: String

**policyName (p. 66)**

The policy name.

Type: String


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

**policyVersionId (p. 66)**

The policy version ID.

Type: String

Pattern: [0-9]+
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 Go - Pilot
- 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. 120) 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

```plaintext
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. 69)**

The policy name.


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

**setAsDefault (p. 69)**

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. 69)**

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. 69)

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

policyArn (p. 69)

The policy ARN.
Type: String

policyDocument (p. 69)

The JSON document that describes the policy.
Type: String

policyVersionId (p. 69)

The policy version ID.
Type: String
Pattern: [0-9]+
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 Go - Pilot
- 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. 72)

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. 72)

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

Type: Integer


Required: No

roleArn (p. 72)

The role ARN.

Type: String


Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json
AWS IoT API Reference
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. 72)

The role alias.

Type: String


Pattern: [\w=,@-]+

roleAliasArn (p. 72)

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

LimitExceeded Exception

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateScheduledAudit
Service: AWS IoT

Creates a scheduled audit that is run at a specified time interval.

Request Syntax

```json
POST /audit/scheduledaudits/scheduledAuditName HTTP/1.1
Content-type: application/json

{
  "dayOfMonth": "string",
  "dayOfWeek": "string",
  "frequency": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "targetCheckNames": [ "string" ]
}
```

URI Request Parameters

The request requires the following URI parameters.

scheduledAuditName (p. 75)

The name you want to give to the scheduled audit. (Max. 128 chars)


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

Request Body

The request accepts the following data in JSON format.

dayOfMonth (p. 75)

The day of the month on which the scheduled audit takes place. Can be "1" through "31" or "LAST". This field is required if the "frequency" parameter is set to "MONTHLY". If days 29-31 are specified, and the month does not have that many days, the audit takes place on the "LAST" day of the month.

Type: String

Pattern: ^([1-9]|[12][0-9]|3[01])$|^LAST$

Required: No
dayOfWeek (p. 75)

The day of the week on which the scheduled audit takes place. Can be one of "SUN", "MON", "TUE", "WED", "THU", "FRI" or "SAT". This field is required if the "frequency" parameter is set to "WEEKLY" or "BIWEEKLY".

Type: String
Valid Values: SUN | MON | TUE | WED | THU | FRI | SAT

Required: No

frequency (p. 75)

How often the scheduled audit takes place. Can be one of "DAILY", "WEEKLY", "BIWEEKLY" or "MONTHLY". The actual start time of each audit is determined by the system.

Type: String

Valid Values: DAILY | WEEKLY | BIWEEKLY | MONTHLY

Required: Yes

tags (p. 75)

Metadata which can be used to manage the scheduled audit.

Type: Array of Tag (p. 599) objects

Required: No

targetCheckNames (p. 75)

Which checks are performed during the scheduled audit. Checks must be enabled for your account. (Use DescribeAccountAuditConfiguration to see the list of all checks including those that are enabled or UpdateAccountAuditConfiguration to select which checks are enabled.)

Type: Array of strings

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "scheduledAuditArn": "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.

scheduledAuditArn (p. 76)

The ARN of the scheduled audit.

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
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateSecurityProfile
Service: AWS IoT

Creates a Device Defender security profile.

Request Syntax

POST /security-profiles/securityProfileName HTTP/1.1
Content-type: application/json

{  
  "additionalMetricsToRetain": [ "string" ],
  "alertTargets": {
    "String" : {
      "alertTargetArn": "string",
      "roleArn": "string"
    }
  },
  "behaviors": [
    {  
      "criteria": {
        "comparisonOperator": "string",
        "consecutiveDatapointsToAlarm": number,
        "consecutiveDatapointsToClear": number,
        "durationSeconds": number,
        "statisticalThreshold": {
          "statistic": "string"
        },
        "value": {
          "cidrs": [ "string" ],
          "count": number,
          "ports": [ number ]
        }
      },
      "metric": "string",
      "name": "string"
    }
  ],
  "securityProfileDescription": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}

URI Request Parameters

The request requires the following URI parameters.

securityProfileName (p. 78)

The name you are giving to the security profile.


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

The request accepts the following data in JSON format.

**additionalMetricsToRetain (p. 78)**

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the profile's behaviors but it is also retained for any metric specified here.

Type: Array of strings

Required: No

**alertTargets (p. 78)**

Specifies the destinations to which alerts are sent. (Alerts are always sent to the console.) Alerts are generated when a device (thing) violates a behavior.

Type: String to AlertTarget (p. 481) object map

Valid Keys: SNS

Required: No

**behaviors (p. 78)**

Specifies the behaviors that, when violated by a device (thing), cause an alert.

Type: Array of Behavior (p. 498) objects

Array Members: Maximum number of 100 items.

Required: No

**securityProfileDescription (p. 78)**

A description of the security profile.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: \[\p{Graph}\x20]*

Required: No

**tags (p. 78)**

Metadata which can be used to manage the security profile.

Type: Array of Tag (p. 599) objects

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

```json
{
    "securityProfileArn": "string",
    "securityProfileName": "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.

securityProfileArn (p. 79)

The ARN of the security profile.
Type: String

securityProfileName (p. 79)

The name you gave to the security profile.
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 Go - Pilot
• 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

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

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

URI Request Parameters

The request requires the following URI parameters.

**streamId (p. 82)**

The stream ID.


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

Request Body

The request accepts the following data in JSON format.

**description (p. 82)**

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.
CreateStream

Pattern: \[^p{C}\]+$  
Required: No

files (p. 82)
The files to stream.
Type: Array of StreamFile (p. 595) objects
Array Members: Minimum number of 1 item. Maximum number of 50 items.
Required: Yes

roleArn (p. 82)
An IAM role that allows the IoT service principal assumes to access your S3 files.
Type: String
Required: Yes

tags (p. 82)
Metadata which can be used to manage streams.
Type: Array of Tag (p. 599) objects
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. 83)
A description of the stream.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: \[^p{C}\]+$  

streamArn (p. 83)
The stream ARN.
Type: String

**streamId (p. 83)**

The stream ID.

Type: String


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

**streamVersion (p. 83)**

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

**LimitExceededException**

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

**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 Go - Pilot
- 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. If this call is made multiple times using the same thing name and configuration, the call will succeed. If this call is made with the same thing name but different configuration a ResourceAlreadyExistsException is thrown.

**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
  },
  "billingGroupName": "string",
  "thingTypeName": "string"
}
```

**URI Request Parameters**
The request requires the following URI parameters.

thingName (p. 86)
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. 86)
The attribute payload, which consists of up to three name/value pairs in a JSON document. For example:

```
{"attributes":{"string1":"string2"}}
```
Type: AttributePayload (p. 483) object
Required: No

billingGroupName (p. 86)
The name of the billing group the thing will be added to.
Type: String
CreateThing

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

**thingTypeName (p. 86)**

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. 87)**

The ARN of the new thing.
Type: String

**thingId (p. 87)**

The thing ID.
Type: String

**thingName (p. 87)**

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.

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

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

Create a thing group.

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

**Request Syntax**

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

{
    "parentGroupName": "string",
    "tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ],
    "thingGroupProperties": {
        "attributePayload": {
            "attributes": {
                "string": "string"
            },
            "merge": boolean
        },
        "thingGroupDescription": "string"
    }
}
```

**URI Request Parameters**
The request requires the following URI parameters.

**thingGroupName (p. 89)**
The thing group name to create.


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

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

**parentGroupName (p. 89)**
The name of the parent thing group.

Type: String


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

Required: No

tags (p. 89)

Metadata which can be used to manage the thing group.

Type: Array of Tag (p. 599) objects

Required: No

thingGroupProperties (p. 89)

The thing group properties.

Type: ThingGroupProperties (p. 611) 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. 90)

The thing group ARN.

Type: String

thingGroupId (p. 90)

The thing group ID.

Type: String


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

thingGroupName (p. 90)

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 Go - Pilot
- 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
{
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "thingTypeProperties": {
    "searchableAttributes": [ "string" ],
    "thingTypeDescription": "string"
  }
}

URI Request Parameters
The request requires the following URI parameters.

thingTypeName (p. 92)
The name of the thing type.
Pattern: [a-zA-Z0-9-_]+

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

tag (p. 92)
Metadata which can be used to manage the thing type.
Type: Array of Tag (p. 599) objects
Required: No

thingTypeProperties (p. 92)
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. 615) 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. 92)
   The Amazon Resource Name (ARN) of the thing type.
   Type: String

thingTypeId (p. 92)
   The thing type ID.
   Type: String

thingTypeName (p. 92)
   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 Go - Pilot
- 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
x-amz-tagging: tags
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"
        }
      }
    ]
  }
}
"roleArn": "string",
"iotEvents": {
  "inputName": "string",
  "messageId": "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
},
"stepFunctions": {
  "executionNamePrefix": "string",
  "roleArn": "string",
  "stateMachineName": "string"
},
"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"
},
"iotEvents": {
 "inputName": "string",
 "messageId": "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
},
"stepFunctions": {
  "executionNamePrefix": "string",
  "roleArn": "string",
  "stateMachineName": "string"
}
},
"ruleDisabled": boolean,
"sql": "string"
}
}

### URI Request Parameters

The request requires the following URI parameters.

**ruleName (p. 95)**

The name of the rule.


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

**tags (p. 95)**

Metadata which can be used to manage the topic rule.

**Note**

For URI Request parameters use format: ...key1=value1&key2=value2...
For the CLI command-line parameter use format: --tags "key1=value1&key2=value2..."
For the cli-input-json file use format: "tags": "key1=value1&key2=value2..."

### Request Body

The request accepts the following data in JSON format.

**topicRulePayload (p. 95)**

The rule payload.

Type: [TopicRulePayload (p. 621)](p. 621) 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

ConflictingResourceUpdateException

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteAccountAuditConfiguration
Service: AWS IoT

Restores the default settings for Device Defender audits for this account. Any configuration data you entered is deleted and all audit checks are reset to disabled.

Request Syntax

```
DELETE /audit/configuration?deleteScheduledAudits=deleteScheduledAudits HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

- `deleteScheduledAudits` (p. 100)
  
  If true, all scheduled audits are 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

- `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 Go - Pilot
- 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. 102)**

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteBillingGroup
Service: AWS IoT
Deletes the billing group.

Request Syntax

DELETE /billing-groups/billingGroupName?expectedVersion=expectedVersion HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.

billingGroupName (p. 104)
The name of the billing group.
Pattern: [a-zA-Z0-9_:--]+
expectedVersion (p. 104)
The expected version of the billing group. If the version of the billing group does not match the expected version specified in the request, the DeleteBillingGroup request is rejected with a VersionConflictException.

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 an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteCACertificate

Service: AWS IoT

Deletes a registered CA certificate.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

certificateId (p. 106)

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

Length Constraints: Fixed length of 64.

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

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

CertificateStateException

The certificate operation is not allowed.

HTTP Status Code: 406

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

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

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

### See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- 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 or IoT thing attached to it or if its status is set to ACTIVE. To delete a certificate, first use the DetachPrincipalPolicy (p. 199) API to detach all policies. Next, use the UpdateCertificate (p. 408) 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. 108)

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. 108)

Forces the deletion of a certificate if it is inactive and is not attached to an IoT thing.

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteDynamicThingGroup

Service: AWS IoT

Deletes a dynamic thing group.

Request Syntax

```
DELETE /dynamic-thing-groups/{thingGroupName}?expectedVersion={expectedVersion} HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

- **expectedVersion (p. 110)**
  
  The expected version of the dynamic thing group to delete.

- **thingGroupName (p. 110)**
  
  The name of the dynamic 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 an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

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 Go - Pilot
- 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. 112)

(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. 112)

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_-]+

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 Go - Pilot
- 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

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

URI Request Parameters

The request requires the following URI parameters.

**executionNumber (p. 114)**

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. 114)**

(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. 114)**

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. 114)**

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 Go - Pilot
- 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?
deleStream=deleteStream&forceDeleteAWSJob=forceDeleteAWSJob HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

deleteStream (p. 116)
Specifies if the stream associated with an OTA update should be deleted when the OTA update is deleted.

forceDeleteAWSJob (p. 116)
Specifies if the AWS Job associated with the OTA update should be deleted with the OTA update is deleted.

otaUpdateId (p. 116)
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

VersionConflictException

An exception thrown when the version of an entity specified with the expectedVersion parameter does not match the latest version in the system.

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 Go - Pilot
- 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. 118)

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 Go - Pilot
- 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. 118). 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. 120)

The name of the policy.


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

policyVersionId (p. 120)

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 Go - Pilot
- 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 Go - Pilot
- 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. 124)`
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteScheduledAudit
Service: AWS IoT
Deletes a scheduled audit.

Request Syntax

```
DELETE /audit/scheduledaudits/scheduledAuditName HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

scheduledAuditName (p. 126)
The name of the scheduled audit you want 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

**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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteSecurityProfile

Service: AWS IoT

Deletes a Device Defender security profile.

Request Syntax

DELETE /security-profiles/securityProfileName?expectedVersion=expectedVersion HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

expectedVersion (p. 128)

The expected version of the security profile. A new version is generated whenever the security profile is updated. If you specify a value that is different than the actual version, a VersionConflictException is thrown.

securityProfileName (p. 128)

The name of the security profile to 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

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 an entity specified with the expectedVersion parameter does not match the latest version in the system.

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 Go - Pilot
- 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. 130)**

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 Go - Pilot
- 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. Returns successfully with no error if the deletion is successful or you specify a thing that doesn't exist.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

expectedVersion (p. 132)

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. 132)

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 an entity specified with the expectedVersion parameter does not match the latest version in the system.

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 Go - Pilot
- 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. 134)
  The expected version of the thing group to delete.
thingGroupName (p. 134)
  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 an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

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 Go - Pilot
- 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. 142), then remove any associated things by calling UpdateThing (p. 434) to change the thing type on any associated thing, and finally use DeleteThingType (p. 136) 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. 136)

The name of the thing type.


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

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

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 Go - Pilot
- 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. 138)**
- 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

**ConflictingResourceUpdateException**
- A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.
  - HTTP Status Code: 409

**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 Go - Pilot
- 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. 140)**

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

**targetType (p. 140)**

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 Go - Pilot
- 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**

```
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. 142)**

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. 142)**

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeAccountAuditConfiguration
Service: AWS IoT

Gets information about the Device Defender audit settings for this account. Settings include how audit
notifications are sent and which audit checks are enabled or disabled.

Request Syntax

GET /audit/configuration 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

{
  "auditCheckConfigurations": {
    "string": {
      "enabled": boolean
    }
  },
  "auditNotificationTargetConfigurations": {
    "string": {
      "enabled": boolean,
      "roleArn": "string",
      "targetArn": "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.

auditCheckConfigurations (p. 144)

Which audit checks are enabled and disabled for this account.

Type: String to AuditCheckConfiguration (p. 484) object map

auditNotificationTargetConfigurations (p. 144)

Information about the targets to which audit notifications are sent for this account.

Type: String to AuditNotificationTarget (p. 489) object map

Valid Keys: SNS
roleArn (p. 144)

The ARN of the role that grants permission to AWS IoT to access information about your devices, policies, certificates and other items as necessary when performing an audit.

On the first call to UpdateAccountAuditConfiguration this parameter is required.

Type: String


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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeAuditTask
Service: AWS IoT

Gets information about a Device Defender audit.

Request Syntax

GET /audit/tasks/{taskId} HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

taskId (p. 146)
The ID of the audit whose information you want to get.


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

{  
  "auditDetails": {  
    "string": {  
      "checkCompliant": boolean,  
      "checkRunStatus": "string",  
      "errorCode": "string",  
      "message": "string",  
      "nonCompliantResourcesCount": number,  
      "totalResourcesCount": number  
    }  
  },  
  "scheduledAuditName": "string",  
  "taskStartTime": number,  
  "taskStatistics": {  
    "canceledChecks": number,  
    "compliantChecks": number,  
    "failedChecks": number,  
    "inProgressChecks": number,  
    "nonCompliantChecks": number,  
    "totalChecks": number,  
    "waitingForDataCollectionChecks": number  
  },  
  "taskStatus": "string",  
  "taskType": "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.

auditDetails (p. 146)

Detailed information about each check performed during this audit.

Type: String to AuditCheckDetails (p. 485) object map

scheduledAuditName (p. 146)

The name of the scheduled audit (only if the audit was a scheduled audit).

Type: String


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

taskStartTime (p. 146)

The time the audit started.

Type: Timestamp

taskStatistics (p. 146)

Statistical information about the audit.

Type: TaskStatistics (p. 600) object

taskStatus (p. 146)

The status of the audit: one of "IN_PROGRESS", "COMPLETED", "FAILED", or "CANCELED".

Type: String

Valid Values: IN_PROGRESS | COMPLETED | FAILED | CANCELED

taskType (p. 146)

The type of audit: "ON_DEMAND_AUDIT_TASK" or "SCHEDULED_AUDIT_TASK".

Type: String

Valid Values: ON_DEMAND_AUDIT_TASK | SCHEDULED_AUDIT_TASK

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeAuthorizer
Service: AWS IoT
Describes an authorizer.

Request Syntax
GET /authorizer/authorizerName HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.

**authorizerName (p. 149)**
The name of the authorizer to describe.
Pattern: \[\w=,@-]+

Request Body
The request does not have a request body.

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

```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. 149)**
The authorizer description.
Type: AuthorizerDescription (p. 492) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeBillingGroup
Service: AWS IoT
Returns information about a billing group.

Request Syntax

```
GET /billing-groups/billingGroupName HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

billingGroupName (p. 151)
The name of the billing 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

{
  "billingGroupArn": "string",
  "billingGroupId": "string",
  "billingGroupMetadata": {
    "creationDate": number
  },
  "billingGroupName": "string",
  "billingGroupProperties": {
    "billingGroupDescription": "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.

billingGroupArn (p. 151)
The ARN of the billing group.
Type: String

billingGroupId (p. 151)
The ID of the billing group.
Type: String


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

billingGroupMetadata (p. 151)

Additional information about the billing group.

Type: BillingGroupMetadata (p. 501) object

billingGroupName (p. 151)

The name of the billing group.

Type: String


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

billingGroupProperties (p. 151)

The properties of the billing group.

Type: BillingGroupProperties (p. 502) object

version (p. 151)

The version of the billing 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 Go - Pilot
• 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. 154)

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. 154)

The CA certificate description.

Type: CACertificateDescription (p. 504) object

### registrationConfig (p. 154)

Information about the registration configuration.

Type: RegistrationConfig (p. 571) 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 Go - Pilot
• 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. 157)
```

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
      }
   }
}
```
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. 157)

The description of the certificate.

Type: CertificateDescription (p. 507) 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 Go - Pilot
- AWS SDK for Java
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. 160)**

The default authorizer's description.

Type: AuthorizerDescription (p. 492) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeEndpoint
Service: AWS IoT

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

Request Syntax

GET /endpoint?endpointType=endpointType HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

endpointType (p. 162)

The endpoint type. Valid endpoint types include:
- `iot:Data` - Returns a VeriSign signed data endpoint.
- `iot:Data-ATS` - Returns an ATS signed data endpoint.
- `iot:CredentialProvider` - Returns an AWS IoT credentials provider API endpoint.
- `iot:Jobs` - Returns an AWS IoT device management Jobs API endpoint.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "endpointAddress": "string"
}

Response Elements

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

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

endpointAddress (p. 162)

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 Go - Pilot
- 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. 164)
    The creation date of the event configuration.
    Type: Timestamp

eventConfigurations (p. 164)
    The event configurations.
    Type: String to Configuration (p. 517) object map

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

lastModifiedDate (p. 164)
    The date the event configurations were last modified.
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 Go - Pilot
- 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. 166)
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. 166)
The index name.
Type: String
Pattern: [a-zA-Z0-9:_-]+
indexStatus (p. 166)
The index status.
Type: String

Valid Values: ACTIVE | BUILDING | REBUILDING

**schema (p. 166)**

Contains a value that specifies the type of indexing performed. Valid values are:

- REGISTRY – Your thing index contains only registry data.
- REGISTRY_AND_SHADOW - Your thing index contains registry data and shadow data.
- REGISTRY_AND_CONNECTIVITY_STATUS - Your thing index contains registry data and thing connectivity status data.
- REGISTRY_AND_SHADOW_AND_CONNECTIVITY_STATUS - Your thing index contains registry data, shadow data, and thing connectivity status 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 Go - Pilot
• 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. 169)**

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": {
    "abortConfig": {
      "criteriaList": [
        {
          "action": "string",
          "failureType": "string",
          "minNumberOfExecutedThings": number,
          "thresholdPercentage": number
        }
      ]
    },
    "comment": "string",
    "completedAt": number,
    "createdAt": number,
    "description": "string",
    "forceCanceled": boolean,
    "jobArn": "string",
    "jobExecutionsRolloutConfig": {
      "exponentialRate": {
        "baseRatePerMinute": number,
        "incrementFactor": number,
        "rateIncreaseCriteria": {
          "numberOfNotifiedThings": number,
          "numberOfSucceededThings": number
        }
      }
    }
  }
}```
"maximumPerMinute": number,
"jobId": "string",
"jobProcessDetails": {
  "numberOfCanceledThings": number,
  "numberOfFailedThings": number,
  "numberOfInProgressThings": number,
  "numberOfQueuedThings": number,
  "numberOfRejectedThings": number,
  "numberOfRemovedThings": number,
  "numberOfSucceededThings": number,
  "numberOfTimedOutThings": number,
  "processingTargets": [ "string" ]
},
"lastUpdatedAt": number,
"presignedUrlConfig": {
  "expiresInSec": number,
  "roleArn": "string"
},
"reasonCode": "string",
"status": "string",
"targets": [ "string" ],
"targetSelection": "string",
"timeoutConfig": {
  "inProgressTimeoutInMinutes": 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.

documentSource (p. 169)

An S3 link to the job document.

Type: String


job (p. 169)

Information about the job.

Type: Job (p. 535) 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 Go - Pilot
- 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. 172)

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

jobId (p. 172)

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. 172)

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": {
    "approximateSecondsBeforeTimedOut": number,
    "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. 172)**

Information about the job execution.

Type: JobExecution (p. 538) 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 Go - Pilot
- 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. 175)

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. 175)

The role alias description.

Type: RoleAliasDescription (p. 576) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeScheduledAudit
Service: AWS IoT

Gets information about a scheduled audit.

Request Syntax

GET /audit/scheduledaudits/{scheduledAuditName} HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

scheduledAuditName (p. 177)

The name of the scheduled audit whose information you want to get.


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

{
   "dayOfMonth": "string",
   "dayOfWeek": "string",
   "frequency": "string",
   "scheduledAuditArn": "string",
   "scheduledAuditName": "string",
   "targetCheckNames": ["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.

dayOfMonth (p. 177)

The day of the month on which the scheduled audit takes place. Will be "1" through "31" or "LAST". If days 29-31 are specified, and the month does not have that many days, the audit takes place on the "LAST" day of the month.

Type: String

Pattern: ^([1-9]|[12][0-9]|3[01])$|^LAST$
dayOfWeek (p. 177)

The day of the week on which the scheduled audit takes place. One of "SUN", "MON", "TUE", "WED", "THU", "FRI" or "SAT".

Type: String

Valid Values: SUN | MON | TUE | WED | THU | FRI | SAT

frequency (p. 177)

How often the scheduled audit takes place. One of "DAILY", "WEEKLY", "BIWEEKLY" or "MONTHLY". The actual start time of each audit is determined by the system.

Type: String

Valid Values: DAILY | WEEKLY | BIWEEKLY | MONTHLY

scheduledAuditArn (p. 177)

The ARN of the scheduled audit.

Type: String

scheduledAuditName (p. 177)

The name of the scheduled audit.

Type: String


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

targetCheckNames (p. 177)

Which checks are performed during the scheduled audit. (Note that checks must be enabled for your account. Use DescribeAccountAuditConfiguration to see the list of all checks including those that are enabled or UpdateAccountAuditConfiguration to select which checks are enabled.)

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

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeSecurityProfile
Service: AWS IoT

Gets information about a Device Defender security profile.

Request Syntax

GET /security-profiles/securityProfileName HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

securityProfileName (p. 180)

The name of the security profile whose information you want to get.
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

{  
  "additionalMetricsToRetain": [ "string" ],
  "alertTargets": {  
    "String" : {
      "alertTargetArn": "string",
      "roleArn": "string"
    }
  },
  "behaviors": [
    {
      "criteria": {
        "comparisonOperator": "string",
        "consecutiveDatapointsToAlarm": number,
        "consecutiveDatapointsToClear": number,
        "durationSeconds": number,
        "statisticalThreshold": {
          "statistic": "string"
        },
        "value": {
          "cidrs": [ "string" ],
          "count": number,
          "ports": [ number ]
        }
      },
      "metric": "string",
      "name": "string"
    }
  ]
}
"creationDate": number,
"lastModifiedDate": number,
"securityProfileArn": "string",
"securityProfileDescription": "string",
"securityProfileName": "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.

**additionalMetricsToRetain (p. 180)**

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the profile's behaviors but it is also retained for any metric specified here.

Type: Array of strings

**alertTargets (p. 180)**

Where the alerts are sent. (Alerts are always sent to the console.)

Type: String to AlertTarget (p. 481) object map

Valid Keys: SNS

**behaviors (p. 180)**

Specifies the behaviors that, when violated by a device (thing), cause an alert.

Type: Array of Behavior (p. 498) objects

Array Members: Maximum number of 100 items.

**creationDate (p. 180)**

The time the security profile was created.

Type: Timestamp

**lastModifiedDate (p. 180)**

The time the security profile was last modified.

Type: Timestamp

**securityProfileArn (p. 180)**

The ARN of the security profile.

Type: String

**securityProfileDescription (p. 180)**

A description of the security profile (associated with the security profile when it was created or updated).

Type: String

Length Constraints: Maximum length of 1000.

Pattern: [\p{Graph}\x20]*
securityProfileName (p. 180)

The name of the security profile.

Type: String


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

version (p. 180)

The version of the security profile. A new version is generated whenever the security profile is updated.

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 Go - Pilot
- 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. 183)
The stream ID.
Pattern: [a-zA-Z0-9-_]+

Request Body
The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

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

Response Elements
If the action is successful, the service sends back an HTTP 200 response.
The following data is returned in JSON format by the service.
streamInfo (p. 183)

Information about the stream.
Type: StreamInfo (p. 596) 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 Go - Pilot
- 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. 185)**

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"
   },
   "billingGroupName": "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. 185)**

The thing 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: \[a-zA-Z0-9_.,@/:#-]*\]

**billingGroupName (p. 185)**

The name of the billing group the thing belongs to.

Type: String


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

**defaultClientId (p. 185)**

The default client ID.

Type: String

**thingArn (p. 185)**

The ARN of the thing to describe.

Type: String

**thingId (p. 185)**

The ID of the thing to describe.

Type: String

**thingName (p. 185)**

The name of the thing.

Type: String


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

**thingTypeName (p. 185)**

The thing type name.

Type: String


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

**version (p. 185)**

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 Go - Pilot
- 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. 188)

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

{
  "indexName": "string",
  "queryString": "string",
  "queryVersion": "string",
  "status": "string",
  "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.

**indexName (p. 188)**

The dynamic thing group index name.

Type: String


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

**queryString (p. 188)**

The dynamic thing group search query string.

Type: String

Length Constraints: Minimum length of 1.

**queryVersion (p. 188)**

The dynamic thing group query version.

Type: String

**status (p. 188)**

The dynamic thing group status.

Type: String

Valid Values: ACTIVE | BUILDING | REBUILDING

**thingGroupArn (p. 188)**

The thing group ARN.

Type: String

**thingGroupId (p. 188)**

The thing group ID.

Type: String


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

**thingGroupMetadata (p. 188)**

Thing group metadata.

Type: ThingGroupMetadata (p. 610) object

**thingGroupName (p. 188)**

The name of the thing group.
Type: String


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

thingGroupProperties (p. 188)

The thing group properties.

Type: ThingGroupProperties (p. 611) object

version (p. 188)

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 Go - Pilot
- 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. 191)

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. 191)

The task creation date.

Type: Timestamp

failureCount (p. 191)

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

**inputFileBucket (p. 191)**

The S3 bucket that contains the input file.

Type: String


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

**inputFileKey (p. 191)**

The input file key.

Type: String


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

**lastModifiedDate (p. 191)**

The date when the task was last modified.

Type: Timestamp

**message (p. 191)**

The message.

Type: String

Length Constraints: Maximum length of 2048.

**percentageProgress (p. 191)**

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. 191)**

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

Type: String


**status (p. 191)**

The status of the bulk thing provisioning task.

Type: String

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

**successCount (p. 191)**

The number of things successfully provisioned.

Type: Integer

**taskId (p. 191)**

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

**templateBody (p. 191)**

The task's template.

Type: String

### Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

### See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- 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. 194)**

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. 194)**

The thing type ARN.

Type: String
thingTypeId (p. 194)

The thing type ID.

Type: String

thingTypeMetadata (p. 194)

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. 614) object

thingTypeName (p. 194)

The name of the thing type.

Type: String


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

thingTypeProperties (p. 194)

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

Type: ThingTypeProperties (p. 615) 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 Go - Pilot
- 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. 197)**

The policy to detach.
Pattern: `[\w+=,.@-]+`

Request Body

The request accepts the following data in JSON format.

**target (p. 197)**

The target from which the policy will be detached.
Type: String
Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

**InternalFailureException**

An unexpected error has occurred.

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

LimitExceededException
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 Go - Pilot
- 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. 197) 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. 199)**

The name of the policy to detach.


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

**principal (p. 199)**

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DetachSecurityProfile
Service: AWS IoT

Disassociates a Device Defender security profile from a thing group or from this account.

Request Syntax

```text
DELETE /security-profiles/securityProfileName/targets?
securityProfileTargetArn=securityProfileTargetArn HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

- **securityProfileName (p. 201)**
  The security profile that is detached.
  Pattern: `[a-zA-Z0-9:_-]+`

- **securityProfileTargetArn (p. 201)**
  The ARN of the thing group from which the security profile is detached.

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

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- 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. A principal can be X.509 certificates, IAM users, groups, and roles, Amazon Cognito identities or federated identities.

**Note**

This call is asynchronous. It might take several seconds for the detachment to propagate.

**Request Syntax**

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

**URI Request Parameters**

The request requires the following URI parameters.

**principal (p. 203)**

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. 203)**

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 Go - Pilot
- 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. 205)**

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

**ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

**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 Go - Pilot
- 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. 207)**

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

**ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

**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 Go - Pilot](#)
- [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. 209)

The thing name.


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

Request Body

The request accepts the following data in JSON format.

cognitoIdentityPoolId (p. 209)

The Cognito identity pool ID.

Type: String

Required: No

principal (p. 209)

The principal.

Type: String

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "effectivePolicies": [
   
   ]
}
"policyArn": "string",
"policyDocument": "string",
"policyName": "string"
}
}

Response Elements

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

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

**effectivePolicies (p. 209)**

The effective policies.

Type: Array of EffectivePolicy (p. 524) 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 Go - Pilot
- 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

{  
  "thingGroupIndexingConfiguration": {  
    "thingGroupIndexingMode": "string"
  },
  "thingIndexingConfiguration": {  
    "thingConnectivityIndexingMode": "string",
    "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.

thingGroupIndexingConfiguration (p. 212)

The index configuration.

Type: ThingGroupIndexingConfiguration (p. 609) object

thingIndexingConfiguration (p. 212)

Thing indexing configuration.

Type: ThingIndexingConfiguration (p. 612) 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 Go - Pilot
- 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. 214)

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. 214)

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 Go - Pilot
- 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.

NOTE: use of this command is not recommended. Use GetV2LoggingOptions instead.

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. 216)

   The logging level.

   Type: String

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

roleArn (p. 216)

   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 Go - Pilot
- 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. 218)
The OTA update ID.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "otaUpdateInfo": {
        "additionalParameters": {
            "string": "string"
        },
        "awsIotJobArn": "string",
        "awsIotJobId": "string",
        "awsJobExecutionsRolloutConfig": {
            "maximumPerMinute": number
        },
        "creationDate": number,
        "description": "string",
        "errorInfo": {
            "code": "string",
            "message": "string"
        },
        "lastModifiedDateTime": number,
        "otaUpdateArn": "string",
        "otaUpdateFiles": [
        {
            "attributes": {
                "string": "string"
            },
            "codeSigning": {
                "awsSignerJobId": "string",
                "customCodeSigning": {
                    "certificateChain": {
                        "certificateName": "string",
                    }
                }
            }
        }
    }
}
GetOTAUpdate

"inlineDocument": "string",
"hashAlgorithm": "string",
"signature": {
  "inlineDocument": "blob",
"signatureAlgorithm": "string"
},

"startSigningJobParameter": {
  "destination": {
    "s3Destination": {
      "bucket": "string",
      "prefix": "string"
    }
  },
  "signingProfileName": "string",
  "signingProfileParameter": {
    "certificateArn": "string",
    "certificatePathOnDevice": "string",
    "platform": "string"
  }
},

"fileLocation": {
  "s3Location": {
    "bucket": "string",
    "key": "string",
    "version": "string"
  },
  "stream": {
    "fileId": number,
    "streamId": "string"
  }
},

"fileName": "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. 218)**

The OTA update info.

Type: [OTAUpdateInfo (p. 559)]

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 Go - Pilot
- 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. 221)**

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. 221)**

The date the policy was created.

Type: Timestamp

**defaultVersionId (p. 221)**

The default policy version ID.

Type: String
Pattern: [0-9]+  

**generationId (p. 221)**  
The generation ID of the policy.  
Type: String  

**lastModifiedDate (p. 221)**  
The date the policy was last modified.  
Type: Timestamp  

**policyArn (p. 221)**  
The policy ARN.  
Type: String  

**policyDocument (p. 221)**  
The JSON document that describes the policy.  
Type: String  

**policyName (p. 221)**  
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 Go - Pilot
- 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. 224)

The name of the policy.
Pattern: [\w+=,.@-]+

policyVersionId (p. 224)

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. 224)

The date the policy version was created.
Type: Timestamp

generationId (p. 224)
The generation ID of the policy version.

Type: String

isDefaultVersion (p. 224)
Specifies whether the policy version is the default.

Type: Boolean

lastModifiedDate (p. 224)
The date the policy version was last modified.

Type: Timestamp

policyArn (p. 224)
The policy ARN.

Type: String

policyDocument (p. 224)
The JSON document that describes the policy.

Type: String

policyName (p. 224)
The policy name.

Type: String


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

policyVersionId (p. 224)
The policy version ID.

Type: String

Pattern: [0-9]+

Errors

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

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

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

*ServiceUnavailableException*

The service is temporarily unavailable.

HTTP Status Code: 503

*ThrottlingException*

The rate exceeds the limit.

HTTP Status Code: 429

*UnauthorizedException*

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- 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. 227)

The CA certificate registration code.

Type: String

Length Constraints: Fixed length of 64.

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400
ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

Service: AWS IoT

Gets statistics about things that match the specified query.

**Request Syntax**

```
POST /indices/statistics HTTP/1.1
Content-type: application/json

{
   "aggregationField": "string",
   "indexName": "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.

**aggregationField (p. 229)**

The aggregation field name. Currently not supported.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**indexName (p. 229)**

The name of the index to search. The default value is AWS_Things.

Type: String


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

Required: No

**queryString (p. 229)**

The query used to search. You can specify "*" for the query string to get the count of all indexed things in your AWS account.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**queryVersion (p. 229)**

The version of the query used to search.
Type: String
Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

```json
{
    "statistics": {
        "count": 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.

statistics (p. 230)

The statistics returned by the Fleet Indexing service based on the query and aggregation field.

Type: Statistics (p. 592) object

Errors

IndexNotReadyException

The index is not ready.
HTTP Status Code: 400

InternalFailureException

An unexpected error has occurred.
HTTP Status Code: 500

InvalidAggregationException

The aggregation is invalid.
HTTP Status Code: 400

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 Go - Pilot
- 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. 232)

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"
},
"iotEvents": {
"inputName": "string",
"messageId": "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
},
"stepFunctions": {
"executionNamePrefix": "string",
"roleArn": "string",
"stateMachineName": "string"
GetTopicRule

},

"awsIoTSqlVersion": "string",
"createdAt": number,
"description": "string",
"errorAction": {
  "cloudwatchAlarm": {
    "alarmName": "string",
    "roleArn": "string",
    "stateReason": "string",
    "stateValue": "string"
  },
  "cloudwatchMetric": {
    "metricName": "string",
    "metricNamespace": "string",
    "metricTimestamp": "string",
    "metricUnit": "string",
    "metricValue": "string",
    "roleArn": "string"
  },
  "dynamoDB": {
    "hashKeyField": "string",
    "hashKeyType": "string",
    "hashKeyValue": "string",
    "operation": "string",
    "payloadField": "string",
    "rangeKeyField": "string",
    "rangeKeyType": "string",
    "rangeKeyValue": "string",
    "roleArn": "string",
    "tableName": "string"
  },
  "dynamodbv2": {
    "putItem": {
      "tableName": "string"
    },
    "roleArn": "string"
  },
  "elasticsearch": {
    "endpoint": "string",
    "id": "string",
    "index": "string",
    "roleArn": "string",
    "type": "string"
  },
  "firehose": {
    "deliveryStreamName": "string",
    "roleArn": "string",
    "separator": "string"
  },
  "iotAnalytics": {
    "channelArn": "string",
    "channelName": "string",
    "roleArn": "string"
  },
  "iotEvents": {
    "inputName": "string",
    "messageId": "string",
    "roleArn": "string"
  },
  "kinesis": {
    "partitionKey": "string",
    "roleArn": "string",
    "streamName": "string"
  },
  "iotEvents": {
    "inputName": "string",
    "messageId": "string",
    "roleArn": "string"
  },
  "iotEvents": {
    "inputName": "string",
    "messageId": "string",
    "roleArn": "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
},
"stepFunctions": {
   "executionNamePrefix": "string",
   "roleArn": "string",
   "stateMachineName": "string"
},
"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. 232)**

The rule.

Type: TopicRule (p. 617) object

**ruleArn (p. 232)**

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetV2LoggingOptions
Service: AWS IoT
Gets the fine grained logging options.

Request Syntax
GET /v2LoggingOptions HTTP/1.1

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

Request Body
The request does not have a request body.

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

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

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

defaultLogLevel (p. 237)
  The default log level.
  Type: String
  Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED
disableAllLogs (p. 237)
  Disables all logs.
  Type: Boolean
roleArn (p. 237)
  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

`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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListActiveViolations
Service: AWS IoT

Lists the active violations for a given Device Defender security profile.

Request Syntax

GET /active-violations?
maxResults=maxResults&nextToken=nextToken&securityProfileName=securityProfileName&thingName=thingName
HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 239)

The maximum number of results to return at one time.


nextToken (p. 239)

The token for the next set of results.

securityProfileName (p. 239)

The name of the Device Defender security profile for which violations are listed.


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

thingName (p. 239)

The name of the thing whose active violations are listed.


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

{  
  "activeViolations": [  
    {  
      "behavior": {  
        "criteria": {  
          "comparisonOperator": "string",  
          "consecutiveDatapointsToAlarm": number,  
          "consecutiveDatapointsToClear": number,  
          ....  
        }  
      }  
    }  
  ]  
}
"durationSeconds": number,
"statisticalThreshold": {
  "statistic": "string"
},
"value": {
  "cidrs": [ "string" ],
  "count": number,
  "ports": [ number ]
},
"metric": "string",
"name": "string"
},
"lastViolationTime": number,
"lastViolationValue": {
  "cidrs": [ "string" ],
  "count": number,
  "ports": [ number ]
},
"securityProfileName": "string",
"thingName": "string",
"violationId": "string",
"violationStartTime": number
],
"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.

**activeViolations (p. 239)**

The list of active violations.

Type: Array of ActiveViolation (p. 479) objects

**nextToken (p. 239)**

A token that can be used to retrieve 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

**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 Go - Pilot
- 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. 242)**

The token to retrieve the next set of results.

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

**pageSize (p. 242)**

The maximum number of results to be returned per request.


**recursive (p. 242)**

When true, recursively list attached policies.

**target (p. 242)**

The group or principal for which the policies will be listed.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

```
{
  "nextMarker": "string",
  "policies": [
    {
      "policyArn": "string",
      "policyName": "string"
    }
  ]
}
```

Response Elements

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

The following data is returned in JSON format by the service.
**nextMarker (p. 242)**

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. 242)**

The policies.

Type: Array of Policy (p. 565) 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 Go - Pilot
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
ListAuditFindings

Service: AWS IoT

Lists the findings (results) of a Device Defender audit or of the audits performed during a specified time period. (Findings are retained for 180 days.)

Request Syntax

POST /audit/findings HTTP/1.1
Content-type: application/json

{
   "checkName": "string",
   "endTime": number,
   "maxResults": number,
   "nextToken": "string",
   "resourceIdentifier": {
      "account": "string",
      "caCertificateId": "string",
      "clientId": "string",
      "cognitoIdentityPoolId": "string",
      "deviceCertificateId": "string",
      "policyVersionIdentifier": {
         "policyName": "string",
         "policyVersionId": "string"
      }
   },
   "startTime": number,
   "taskId": "string"
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**checkName (p. 245)**

A filter to limit results to the findings for the specified audit check.

Type: String  
Required: No

**endTime (p. 245)**

A filter to limit results to those found before the specified time. You must specify either the startTime and endTime or the taskId, but not both.

Type: Timestamp  
Required: No

**maxResults (p. 245)**

The maximum number of results to return at one time. The default is 25.

Type: Integer

Required: No

nextToken (p. 245)

The token for the next set of results.

Type: String

Required: No

resourceIdentifier (p. 245)

Information identifying the non-compliant resource.

Type: ResourceIdentifier (p. 574) object

Required: No

startTime (p. 245)

A filter to limit results to those found after the specified time. You must specify either the startTime and endTime or the taskId, but not both.

Type: Timestamp

Required: No

taskId (p. 245)

A filter to limit results to the audit with the specified ID. You must specify either the taskId or the startTime and endTime, but not both.

Type: String


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

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  "findings": [  {   "checkName": "string",   "findingTime": number,   "nonCompliantResource": {   "additionalInfo": {   "string": "string"   },   "resourceIdentifier": {   "account": "string",   "caCertificateId": "string",   "clientId": "string",   "cognitoIdentityPoolId": "string",   "deviceCertificateId": "string",   "policyVersionIdentifier": {   "policyName": "string"   }  }  }  ]}
"policyVersionId": "string"
},
"resourceType": "string"
},
"reasonForNonCompliance": "string",
"reasonForNonComplianceCode": "string",
"relatedResources": [
{
"additionalInfo": {
    "string": "string"
},
"resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateId": "string",
    "policyVersionIdentifier": {
        "policyName": "string",
        "policyVersionId": "string"
    }
},
"resourceType": "string"
}
],
"severity": "string",
"taskId": "string",
"taskStartTime": number
],
"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.

findings (p. 246)

The findings (results) of the audit.

Type: Array of AuditFinding (p. 487) objects

nextToken (p. 246)

A token that can be used to retrieve 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

**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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListAuditTasks

Service: AWS IoT

Lists the Device Defender audits that have been performed during a given time period.

Request Syntax

```
GET /audit/tasks?
endTime=endTime&maxResults=maxResults&nextToken=nextToken&startTime=startTime&taskStatus=taskStatus&taskType=taskType
```

HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

**endTime (p. 249)**

The end of the time period.

**maxResults (p. 249)**

The maximum number of results to return at one time. The default is 25.


**nextToken (p. 249)**

The token for the next set of results.

**startTime (p. 249)**

The beginning of the time period. Note that audit information is retained for a limited time (180 days). Requesting a start time prior to what is retained results in an "InvalidRequestException".

**taskStatus (p. 249)**

A filter to limit the output to audits with the specified completion status: can be one of "IN_PROGRESS", "COMPLETED", "FAILED" or "CANCELED".

Valid Values: IN_PROGRESS | COMPLETED | FAILED | CANCELED

**taskType (p. 249)**

A filter to limit the output to the specified type of audit: can be one of "ON_DEMAND_AUDIT_TASK" or "SCHEDULED_AUDIT_TASK".

Valid Values: ON_DEMAND_AUDIT_TASK | SCHEDULED_AUDIT_TASK

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
{
  "nextToken": "string",
}
```
"tasks": [
  {
    "taskId": "string",
    "taskStatus": "string",
    "taskType": "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)

A token that can be used to retrieve the next set of results, or null if there are no additional results.

Type: String
tasks (p. 249)

The audits that were performed during the specified time period.

Type: Array of AuditTaskMetadata (p. 490) objects

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 Go - Pilot
- 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. 252)
Return the list of authorizers in ascending alphabetical order.

marker (p. 252)
A marker used to get the next set of results.

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

pageSize (p. 252)
The maximum number of results to return at one time.


status (p. 252)
The status of the list authorizers request.

Valid Values: ACTIVE | INACTIVE

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

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

Response Elements

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

**authorizers (p. 252)**

The authorizers.

Type: Array of AuthorizerSummary (p. 494) objects

**nextMarker (p. 252)**

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
ListBillingGroups
Service: AWS IoT
Lists the billing groups you have created.

Request Syntax
GET /billing-groups?
maxResults=maxResults&namePrefixFilter=namePrefixFilter&nextToken=nextToken HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.
maxResults (p. 255)
The maximum number of results to return per request.
namePrefixFilter (p. 255)
Limit the results to billing groups whose names have the given prefix.
Pattern: [a-zA-Z0-9:_-]+
nextToken (p. 255)
The token to retrieve 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
{
  "billingGroups": [
    {
      "groupArn": "string",
      "groupName": "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.

255
billingGroups (p. 255)

The list of billing groups.

Type: Array of GroupNameAndArn (p. 531) objects

nextToken (p. 255)

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

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 Go - Pilot
- 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. 257)
Determines the order of the results.

marker (p. 257)
The marker for the next set of results.

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

pageSize (p. 257)
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. 257)**

The CA certificates registered in your AWS account.

Type: Array of `CACertificate` (p. 503) objects

**nextMarker (p. 257)**

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 Go - Pilot
- 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. 260)
Specifies the order for results. If True, the results are returned in ascending order, based on the creation date.

marker (p. 260)
The marker for the next set of results.

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

pageSize (p. 260)
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. 260)**

The descriptions of the certificates.

Type: Array of Certificate (p. 506) objects

**nextMarker (p. 260)**

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 Go - Pilot
- 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. 263)

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

**caCertificateId** (p. 263)

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. 263)

The marker for the next set of results.

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

**pageSize** (p. 263)

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. 263)

The device certificates signed by the specified CA certificate.

Type: Array of Certificate (p. 506) objects

nextMarker (p. 263)

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 Go - Pilot
• 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. 266)

- The maximum number of results to return at one time.

nextToken (p. 266)

- 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. 266)

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

nextToken (p. 266)

- The token used to get the next set of results, or null if there are no additional results.
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 Go - Pilot
- 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. 268)**

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. 268)**

The maximum number of results to be returned per request.


**nextToken (p. 268)**

The token to retrieve the next set of results.

**status (p. 268)**

The status of the job.

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

Request Body

The request does not have a request body.

Response Syntax

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

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

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. 268)**

A list of job execution summaries.

Type: Array of JobExecutionSummaryForJob (p. 544) objects

**nextToken (p. 268)**

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 Go - Pilot
- 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. 271)

The maximum number of results to be returned per request.


nextToken (p. 271)

The token to retrieve the next set of results.

status (p. 271)

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

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

thingName (p. 271)

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

```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. 271)

A list of job execution summaries.

Type: Array of JobExecutionSummaryForThing (p. 545) objects

nextToken (p. 271)

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 Go - Pilot
- 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. 274)**

The maximum number of results to return per request.


**nextToken (p. 274)**

The token to retrieve the next set of results.

**status (p. 274)**

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. 274)**

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. 274)**

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


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

**thingGroupName (p. 274)**

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

{
  "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. 275)

A list of jobs.

Type: Array of JobSummary (p. 548) objects

nextToken (p. 275)

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListOTAUpdates

Service: AWS IoT

Lists OTA updates.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

**maxResults (p. 277)**

The maximum number of results to return at one time.


**nextToken (p. 277)**

A token used to retrieve the next set of results.

**otaUpdateStatus (p. 277)**

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. 277)**

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

Type: String

**otaUpdates (p. 277)**

A list of OTA update jobs.

Type: Array of [OTAUpdateSummary (p. 562)] 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 Go - Pilot
- 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. 279)
Specifies the order for results. If True, the results are returned in ascending order, based on the creation date.

marker (p. 279)
The marker for the next set of results.
Pattern: [A-Za-z0-9+/-]+={0,2}

pageSize (p. 279)
The result page size.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

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

Response Elements

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

**nextMarker (p. 279)**

The marker for the next set of results.

Type: String

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

**outgoingCertificates (p. 279)**

The certificates that are being transferred but not yet accepted.

Type: Array of OutgoingCertificate (p. 563) 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 Go - Pilot
- 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. 282)
   Specifies the order for results. If true, the results are returned in ascending creation order.

marker (p. 282)
   The marker for the next set of results.
   Pattern: [A-Za-z0-9+/]{0,2}

pageSize (p. 282)
   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. 282)
   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. 282)**

The descriptions of the policies.

Type: Array of **Policy (p. 565)** 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 Go - Pilot
- 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. 306) instead.

**Request Syntax**

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

**URI Request Parameters**

The request requires the following URI parameters.

- **ascendingOrder** (p. 284)
  - Specifies the order for results. If true, the results are returned in ascending creation order.
- **marker** (p. 284)
  - The marker for the next set of results.
  - Pattern: `[A-Za-z0-9+/]=?{0,2}
- **pageSize** (p. 284)
  - The result page size.
- **policyName** (p. 284)
  - 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. 284)*

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. 284)*

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

Request Syntax

GET /policies/policyName/version HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

policyName (p. 287)
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.

policyVersions (p. 287)
The policy versions.
 Type: Array of PolicyVersion (p. 566) 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 Go - Pilot
- 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. 242) 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. 289)

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

marker (p. 289)

The marker for the next set of results.

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

pageSize (p. 289)

The result page size.


principal (p. 289)

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"  }  ]}

289
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. 289)**

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. 289)**

The policies.

- **Type:** Array of Policy (p. 565) 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 Go - Pilot
- 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. A principal can be X.509 certificates, IAM users, groups, and roles, Amazon Cognito identities or federated identities.

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. 292)
   The maximum number of results to return in this operation.

nextToken (p. 292)
   The token to retrieve the next set of results.

principal (p. 292)
   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. 292)
   The token used to get the next set of results, or null if there are no additional results.
   Type: String

things (p. 292)
   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 Go - Pilot
- 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. 294)**
  - Return the list of role aliases in ascending alphabetical order.
- **marker (p. 294)**
  - A marker used to get the next set of results.
  - Pattern: `[A-Za-z0-9+/]=\{0,2\}`
- **pageSize (p. 294)**
  - 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. 294)**
  - A marker used to get the next set of results.
  - Type: String
  - Pattern: `[A-Za-z0-9+/]=\{0,2\}`
roleAliases (p. 294)

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListScheduledAudits

Service: AWS IoT

Lists all of your scheduled audits.

Request Syntax

```
GET /audit/scheduledaudits?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**maxResults (p. 296)**

The maximum number of results to return at one time. The default is 25.


**nextToken (p. 296)**

The token for 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",
    "scheduledAudits": [
        {
            "dayOfMonth": "string",
            "dayOfWeek": "string",
            "frequency": "string",
            "scheduledAuditArn": "string",
            "scheduledAuditName": "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. 296)**

A token that can be used to retrieve the next set of results, or null if there are no additional results.

Type: String
scheduledAudits (p. 296)

The list of scheduled audits.

Type: Array of ScheduledAuditMetadata (p. 582) objects

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListSecurityProfiles
Service: AWS IoT

Lists the Device Defender security profiles you have created. You can use filters to list only those security profiles associated with a thing group or only those associated with your account.

Request Syntax

GET /security-profiles?maxResults={maxResults}&nextToken={nextToken} HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 298)
The maximum number of results to return at one time.

nextToken (p. 298)
The token for 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",
   "securityProfileIdentifiers": [
      {
         "arn": "string",
         "name": "string"
      }
   ]
}

Response Elements

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

nextToken (p. 298)
A token that can be used to retrieve the next set of results, or null if there are no additional results.
Type: String

securityProfileIdentifiers (p. 298)
A list of security profile identifiers (names and ARNs).
Type: Array of SecurityProfileIdentifier (p. 584) objects

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListSecurityProfilesForTarget

Service: AWS IoT

Lists the Device Defender security profiles attached to a target (thing group).

Request Syntax

```
GET /security-profiles-for-target?
maxResults=maxResults&nextToken=nextToken&recursive=recursive&securityProfileTargetArn=securityProfileTargetArn
HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

- **maxResults (p. 300)**
  
  The maximum number of results to return at one time.
  
  **Valid Range:** Minimum value of 1. Maximum value of 250.

- **nextToken (p. 300)**
  
  The token for the next set of results.

- **recursive (p. 300)**
  
  If true, return child groups as well.

- **securityProfileTargetArn (p. 300)**
  
  The ARN of the target (thing group) whose attached security profiles you want to get.

Request Body

The request does not have a request body.

Response Syntax

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

{
    "nextToken": "string",
    "securityProfileTargetMappings": [
        {
            "securityProfileIdentifier": {
                "arn": "string",
                "name": "string"
            },
            "target": {
                "arn": "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. 300)**

A token that can be used to retrieve the next set of results, or null if there are no additional results.

Type: String

**securityProfileTargetMappings (p. 300)**

A list of security profiles and their associated targets.

Type: Array of SecurityProfileTargetMapping (p. 586) 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

- **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 Go - Pilot
- 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. 302)
Set to true to return the list of streams in ascending order.

maxResults (p. 302)
The maximum number of results to return at a time.


nextToken (p. 302)
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. 302)
A token used to get the next set of results.
Type: String

streams (p. 302)

A list of streams.

Type: Array of StreamSummary (p. 598) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListTagsForResource
Service: AWS IoT

Lists the tags (metadata) you have assigned to the resource.

Request Syntax
GET /tags?nextToken=nextToken&resourceArn=resourceArn HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.

nextToken (p. 304)
The token to retrieve the next set of results.

resourceArn (p. 304)
The ARN of the resource.

Request Body
The request does not have a request body.

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

{  "nextToken": "string",
  "tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}

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

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

nextToken (p. 304)
The token used to get the next set of results, or null if there are no additional results.
Type: String
tags (p. 304)
The list of tags assigned to the resource.
Type: Array of Tag (p. 599) 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

**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 Go - Pilot
- 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. 306)

A marker used to get the next set of results.

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

pageSize (p. 306)

The maximum number of results to return at one time.


policyName (p. 306)

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. 306)

A marker used to get the next set of results.
Type: String
Pattern: [A-Za-z0-9+/]+={0,2} targets (p. 306)
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 Go - Pilot
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
**ListTargetsForSecurityProfile**  
Service: AWS IoT  

Lists the targets (thing groups) associated with a given Device Defender security profile.

**Request Syntax**

```
GET /security-profiles/securityProfileName/targets?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

**URI Request Parameters**

The request requires the following URI parameters.

**maxResults (p. 309)**  
The maximum number of results to return at one time.  

**nextToken (p. 309)**  
The token for the next set of results.

**securityProfileName (p. 309)**  
The security profile.  
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",  
  "securityProfileTargets": [  
    {  
      "arn": "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. 309)

A token that can be used to retrieve the next set of results, or null if there are no additional results.

Type: String

securityProfileTargets (p. 309)

The thing groups to which the security profile is attached.

Type: Array of SecurityProfileTarget (p. 585) 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

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 Go - Pilot
- 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. 311)
The maximum number of results to return at one time.

namePrefixFilter (p. 311)
A filter that limits the results to those with the specified name prefix.
Pattern: [a-zA-Z0-9:_-]+

nextToken (p. 311)
The token to retrieve the next set of results.

parentGroup (p. 311)
A filter that limits the results to those with the specified parent group.
Pattern: [a-zA-Z0-9:_-]+

recursive (p. 311)
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",

311
"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. 311)**

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

Type: String

**thingGroups (p. 311)**

The thing groups.

Type: Array of `GroupNameAndArn (p. 531)` 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 Go - Pilot
- 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. 314)

The maximum number of results to return at one time.


nextToken (p. 314)

The token to retrieve the next set of results.

thingName (p. 314)

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. 314)

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

Type: String

thingGroups (p. 314)

The thing groups.

Type: Array of GroupNameAndArn (p. 531) 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 Go - Pilot
- 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. A principal can be X.509 certificates, IAM users, groups, and roles, Amazon Cognito identities or federated identities.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

thingName (p. 316)
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. 316)
The principals associated with the thing.
Type: Array of strings

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500
AWS IoT API Reference

ListThingPrincipals

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 Go - Pilot
- 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. 318)**
  - The maximum number of results to return per request.
- **nextToken (p. 318)**
  - The token to retrieve the next set of results.
- **reportType (p. 318)**
  - The type of task report.
  - Valid Values: ERRORS | RESULTS
- **taskId (p. 318)**
  - 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. 318)

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

Type: String

reportType (p. 318)

The type of task report.

Type: String

Valid Values: ERRORS | RESULTS

resourceLinks (p. 318)

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
ListThingRegistrationTasks

Service: AWS IoT

List bulk thing provisioning tasks.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

`maxResults` (p. 321)

The maximum number of results to return at one time.


`nextToken` (p. 321)

The token to retrieve the next set of results.

`status` (p. 321)

The status of the bulk thing provisioning task.

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

Request Body

The request does not have a request body.

Response Syntax

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

{
   "nextToken": "string",
   "taskIds": [ "string" ]
}
```

Response Elements

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

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

`nextToken` (p. 321)

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

Type: String
**taskIds (p. 321)**

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 Go - Pilot
- 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. 323)

The attribute name used to search for things.

Length Constraints: Maximum length of 128.

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

attributeValue (p. 323)

The attribute value used to search for things.

Length Constraints: Maximum length of 800.

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

maxResults (p. 323)

The maximum number of results to return in this operation.


nextToken (p. 323)

The token to retrieve the next set of results.

thingTypeName (p. 323)

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
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. 323)**

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

Type: String

**things (p. 323)**

The things.

Type: Array of `ThingAttribute (p. 602)` 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListThingsInBillingGroup

Service: AWS IoT

Lists the things you have added to the given billing group.

Request Syntax

```
GET /billing-groups/{billingGroupName}/things?
maxResults={maxResults}&nextToken={nextToken}
HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

billingGroupName (p. 326)

The name of the billing group.


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

maxResults (p. 326)

The maximum number of results to return per request.


nextToken (p. 326)

The token to retrieve 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",
    "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. 326)

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

Type: String
things (p. 326)

A list of things in the billing 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

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 Go - Pilot
- 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. 328)**
  - The maximum number of results to return at one time.

- **nextToken (p. 328)**
  - The token to retrieve the next set of results.

- **recursive (p. 328)**
  - When true, list things in this thing group and in all child groups as well.

- **thingGroupName (p. 328)**
  - 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. 328)**
  - The token used to get the next set of results, or **null** if there are no additional results.
Type: String

**things (p. 328)**

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 Go - Pilot
- 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. 330)

The maximum number of results to return in this operation.


nextToken (p. 330)

The token to retrieve the next set of results.

thingTypeName (p. 330)

The name of the thing type.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  "nextToken": "string",
   "thingTypes": [
      {  "thingTypeArn": "string",
         "thingTypeMetadata": {  "creationDate": number,
         "deprecated": boolean,
         "deprecationDate": number
      },
      "thingTypeName": "string",
      "thingTypeProperties": {  "searchableAttributes": [ "string" ],
         "thingTypeDescription": "string"
      }
   ]
}
Response Elements

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

**nextToken (p. 330)**

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

Type: String

**thingTypes (p. 330)**

The thing types.

Type: Array of `ThingTypeDefinition (p. 613)` 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 Go - Pilot
• 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. 333)
The maximum number of results to return.
Valid Range: Minimum value of 1. Maximum value of 10000.

nextToken (p. 333)
A token used to retrieve the next value.

ruleDisabled (p. 333)
Specifies whether the rule is disabled.

topic (p. 333)
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. 333)

A token used to retrieve the next value.

Type: String

rules (p. 333)

The rules.

Type: Array of TopicRuleList.Item (p. 619) 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 Go - Pilot
- 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. 335)
The maximum number of results to return at one time.

nextToken (p. 335)
The token used to get the next set of results, or null if there are no additional results.

targetType (p. 335)
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. 335)**

The logging configuration for a target.

Type: Array of LogTargetConfiguration (p. 555) objects

**nextToken (p. 335)**

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListViolationEvents

Service: AWS IoT

Lists the Device Defender security profile violations discovered during the given time period. You can use filters to limit the results to those alerts issued for a particular security profile, behavior or thing (device).

Request Syntax

GET /violation-events?
  endTime=endTime&maxResults=maxResults&nextToken=nextToken&securityProfileName=securityProfileName&startTime=startTime&thingName=thingName

HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

endTime (p. 337)

The end time for the alerts to be listed.

maxResults (p. 337)

The maximum number of results to return at one time.


nextToken (p. 337)

The token for the next set of results.

securityProfileName (p. 337)

A filter to limit results to those alerts generated by the specified security profile.


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

startTime (p. 337)

The start time for the alerts to be listed.

thingName (p. 337)

A filter to limit results to those alerts caused by the specified 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
AWS IoT API Reference

ListViolationEvents

```json
{
  "nextToken": "string",
  "violationEvents": [
    {
      "behavior": {
        "criteria": {
          "comparisonOperator": "string",
          "consecutiveDatapointsToAlarm": number,
          "consecutiveDatapointsToClear": number,
          "durationSeconds": number,
          "statisticalThreshold": {
            "statistic": "string"
          },
          "value": {
            "cidrs": [ "string" ],
            "count": number,
            "ports": [ number ]
          }
        },
        "metric": "string",
        "name": "string"
      },
      "metricValue": {
        "cidrs": [ "string" ],
        "count": number,
        "ports": [ number ]
      },
      "securityProfileName": "string",
      "thingName": "string",
      "violationEventTime": number,
      "violationEventType": "string",
      "violationId": "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. 337)**

A token that can be used to retrieve the next set of results, or null if there are no additional results.

Type: String

**violationEvents (p. 337)**

The security profile violation alerts issued for this account during the given time frame, potentially filtered by security profile, behavior violated, or thing (device) violating.

Type: Array of ViolationEvent (p. 626) objects

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RegisterCA Certificate

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. 340)

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

setAsActive (p. 340)

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. 340)

The CA certificate.

Type: String


Required: Yes

registrationConfig (p. 340)

Information about the registration configuration.

Type: RegistrationConfig (p. 571) object

Required: No

verificationCertificate (p. 340)

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

Response Syntax

HTTP/1.1 200
Content-type: application/json
{
    "certificateArn": "string",
    "certificateId": "string"
}

Response Elements

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

certificateArn (p. 341)
The CA certificate ARN.
    Type: String
certificateId (p. 341)
The CA certificate identifier.
    Type: String
    Length Constraints: Fixed length of 64.
    Pattern: (0x)?[a-zA-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
LimitExceeded Exception
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RegisterCertificate
Service: AWS IoT

Registers a device certificate with AWS IoT. If you have more than one CA certificate that has the same subject field, you must specify the CA certificate that was used to sign the device certificate being registered.

Request Syntax

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

{
   "caCertificatePem": "string",
   "certificatePem": "string",
   "status": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

setAsActive (p. 343)

This parameter has been deprecated.

A boolean value that specifies if the certificate is set to active.

Request Body

The request accepts the following data in JSON format.

cacertificatePem (p. 343)

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

Type: String


Required: No
certificatePem (p. 343)

The certificate data, in PEM format.

Type: String


Required: Yes
status (p. 343)

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. 344)
   The certificate ARN.
   Type: String

certificateId (p. 344)
   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 Go - Pilot
- 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. 346)

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

   Type: String to string map

   Required: No

templateBody (p. 346)

   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. 346)

Type: String

resourceArns (p. 346)
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 Go - Pilot
- 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. 260) 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. 349)

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

Length Constraints: Fixed length of 64.

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

Request Body

The request accepts the following data in JSON format.

rejectReason (p. 349)

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RemoveThingFromBillingGroup

Service: AWS IoT

Removes the given thing from the billing group.

Request Syntax

```
PUT /billing-groups/removeThingFromBillingGroup HTTP/1.1
Content-type: application/json

{
    "billingGroupArn": "string",
    "billingGroupName": "string",
    "thingArn": "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.

**billingGroupArn (p. 351)**

The ARN of the billing group.

Type: String

Required: No

**billingGroupName (p. 351)**

The name of the billing group.

Type: String


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

Required: No

**thingArn (p. 351)**

The ARN of the thing to be removed from the billing group.

Type: String

Required: No

**thingName (p. 351)**

The name of the thing to be removed from the billing group.

Type: String

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

```plaintext
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. 353)**

The ARN of the thing to remove from the group.

Type: String

Required: No

**thingGroupArn (p. 353)**

The group ARN.

Type: String

Required: No

**thingGroupName (p. 353)**

The group name.

Type: String


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

Required: No

**thingName (p. 353)**

The name of the thing to remove from the group.

Type: String

Pattern: \[a-zA-Z0-9:_-]+\nRequired: 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 Go - Pilot
- 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",
"iotEvents": {
  "inputName": "string",
  "messageId": "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
},
"stepFunctions": {
  "executionNamePrefix": "string",
  "roleArn": "string",
  "stateMachineName": "string"
}
"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"
},
"iotEvents": {
  "inputName": "string",
  "messageId": "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",
ReplaceTopicRule

```
"roleArn": "string",
"useBase64": boolean
},
"stepFunctions": {
  "executionNamePrefix": "string",
  "roleArn": "string",
  "stateMachineName": "string"

"ruleDisabled": boolean,
"sql": "string"
}
```

**URI Request Parameters**

The request requires the following URI parameters.

**ruleName (p. 355)**

The name of the rule.


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

**Request Body**

The request accepts the following data in JSON format.

**topicRulePayload (p. 355)**

The rule payload.

Type: TopicRulePayload (p. 621) 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**

**ConflictingResourceUpdateException**

A conflicting resource update exception. This exception is thrown when two pending updates cause a conflict.

HTTP Status Code: 409

**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 Go - Pilot
- 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. 360)

The search index name.

Type: String


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

Required: No

maxResults (p. 360)

The maximum number of results to return at one time.

Type: Integer


Required: No

nextToken (p. 360)

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

Type: String

Required: No

queryString (p. 360)

The search query string.
Type: String

Length Constraints: Minimum length of 1.

Required: Yes

queryVersion (p. 360)

The query version.

Type: String

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "nextToken": "string",
   "thingGroups": [
   {
      "attributes": {
         "string" : "string"
      },
      "parentGroupNames": [ "string" ],
      "thingGroupDescription": "string",
      "thingGroupId": "string",
      "thingGroupName": "string"
   }
   ],
   "things": [                  
   {
      "attributes": {
         "string" : "string"
      },
      "connectivity": {
         "connected": boolean,
         "timestamp": number
      },
      "shadow": "string",
      "thingGroupNames": [ "string" ],
      "thingId": "string",
      "thingName": "string",
      "thingTypeName": "string"
   }
   ]
}

Response Elements

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

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

nextToken (p. 361)

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

Type: String
thingGroups (p. 361)

The thing groups that match the search query.

Type: Array of ThingGroupDocument (p. 607) objects

things (p. 361)

The things that match the search query.

Type: Array of ThingDocument (p. 605) 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 Go - Pilot
• 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. 364)

   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. 364)

   The authorizer ARN.

   Type: String
**authorizerName (p. 364)**

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 Go - Pilot
• 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. 367)**

The policy name.


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

**policyVersionId (p. 367)**

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 Go - Pilot
- 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.

NOTE: use of this command is not recommended. Use SetV2LoggingOptions instead.

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. 369)

  The logging options payload.

  Type: LoggingOptionsPayload (p. 553) 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 Go - Pilot
- 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

```
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. 371)**

The log level.

Type: String

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

Required: Yes

**logTarget (p. 371)**

The log target.

Type: LogTarget (p. 554) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
SetV2LoggingOptions
Service: AWS IoT

Sets the logging options for the V2 logging service.

Request Syntax

```plaintext
POST /v2LoggingOptions HTTP/1.1
Content-type: application/json

{
  "defaultLogLevel": "string",
  "disableAllLogs": boolean,
  "roleArn": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

defaultLogLevel (p. 373)

  The default logging level.
  Type: String
  Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

  Required: No

disableAllLogs (p. 373)

  If true all logs are disabled. The default is false.
  Type: Boolean

  Required: No

roleArn (p. 373)

  The ARN of the role 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
StartOnDemandAuditTask
Service: AWS IoT
Starts an on-demand Device Defender audit.

Request Syntax

```
POST /audit/tasks HTTP/1.1
Content-type: application/json
{
  "targetCheckNames": ["string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

targetCheckNames (p. 375)

Which checks are performed during the audit. The checks you specify must be enabled for your account or an exception occurs. Use DescribeAccountAuditConfiguration to see the list of all checks including those that are enabled or UpdateAccountAuditConfiguration to select which checks are enabled.

Type: Array of strings
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. 375)

The ID of the on-demand audit you started.

Type: String

Patterns: [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

* `LimitExceededException`
  A limit has been exceeded.
  
  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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
StartThingRegistrationTask

Service: AWS IoT

Creates a bulk thing provisioning task.

Request Syntax

```
POST /thing-registration-tasks HTTP/1.1
Content-type: application/json

{
    "inputFileBucket": "string",
    "inputFileKey": "string",
    "roleArn": "string",
    "templateBody": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**inputFileBucket (p. 377)**

The S3 bucket that contains the input file.

Type: String


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

Required: Yes

**inputFileKey (p. 377)**

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. 377)**

The IAM role ARN that grants permission the input file.

Type: String


Required: Yes
templateBody (p. 377)

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. 378)

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 Go - Pilot
- 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. 380)**

- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
TagResource
Service: AWS IoT

Adds to or modifies the tags of the given resource. Tags are metadata which can be used to manage a resource.

Request Syntax

```json
POST /tags HTTP/1.1
Content-type: application/json

{
    "resourceArn": "string",
    "tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

resourceArn (p. 382)

The ARN of the resource.
Type: String
Required: Yes

tags (p. 382)

The new or modified tags for the resource.
Type: Array of Tag (p. 599) objects
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
**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 Go - Pilot
- 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

```
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. 384)**

The MQTT client ID.

Request Body

The request accepts the following data in JSON format.

**authInfos (p. 384)**

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

Type: Array of AuthInfo (p. 491) objects

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

Required: Yes

**cognitoIdentityPoolId (p. 384)**

The Cognito identity pool ID.

Type: String

Required: No

**policyNamesToAdd (p. 384)**

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. 384)

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. 384)

The principal.

Type: String

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

```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"

"missingContextValues": [ "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. 385)

The authentication results.

Type: Array of AuthResult (p. 495) 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 Go - Pilot
- 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. 388)

The custom authorizer name.


Pattern: [\w=,@-]+

Request Body

The request accepts the following data in JSON format.

token (p. 388)

The token returned by your custom authentication service.

Type: String


Required: Yes

tokenSignature (p. 388)

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. 388)

The number of seconds after which the connection is terminated.

Type: Integer

isAuthenticated (p. 388)

True if the token is authenticated, otherwise false.

Type: Boolean

policyDocuments (p. 388)

IAM policy documents.

Type: Array of strings

principalId (p. 388)

The principal ID.

Type: String


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

refreshAfterInSeconds (p. 388)

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 Go - Pilot
- 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. 391)
  - 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. 391)
  - The AWS account.
  - Length Constraints: Fixed length of 12.
  - Pattern: `[0-9]+`

Request Body

The request accepts the following data in JSON format.

- **transferMessage** (p. 391)
  - 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. 392)

   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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UntagResource
Service: AWS IoT

Removes the given tags (metadata) from the resource.

Request Syntax

POST /untag HTTP/1.1
Content-type: application/json

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

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

resourceArn (p. 394)

    The ARN of the resource.
    Type: String
    Required: Yes

tagKeys (p. 394)

    A list of the keys of the tags to be removed from the resource.
    Type: Array of strings
    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

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateAccountAuditConfiguration
Service: AWS IoT

Configures or reconfigures the Device Defender audit settings for this account. Settings include how audit notifications are sent and which audit checks are enabled or disabled.

Request Syntax

```json
PATCH /audit/configuration HTTP/1.1
Content-type: application/json

{
    "auditCheckConfigurations": {
        "string": {
            "enabled": boolean
        }
    },
    "auditNotificationTargetConfigurations": {
        "string": {
            "enabled": boolean,
            "roleArn": "string",
            "targetArn": "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.

AuditCheckConfigurations (p. 396)

- Specifies which audit checks are enabled and disabled for this account. Use DescribeAccountAuditConfiguration to see the list of all checks including those that are currently enabled.

- Note that some data collection may begin immediately when certain checks are enabled. When a check is disabled, any data collected so far in relation to the check is deleted.

- You cannot disable a check if it is used by any scheduled audit. You must first delete the check from the scheduled audit or delete the scheduled audit itself.

- On the first call to UpdateAccountAuditConfiguration this parameter is required and must specify at least one enabled check.

  Type: String to AuditCheckConfiguration (p. 484) object map

  Required: No

AuditNotificationTargetConfigurations (p. 396)

- Information about the targets to which audit notifications are sent.

  Type: String to AuditNotificationTarget (p. 489) object map
**Valid Keys:** SNS

**Required:** No

**roleArn (p. 396)**

The ARN of the role that grants permission to AWS IoT to access information about your devices, policies, certificates and other items as necessary when performing an audit.

**Type:** String

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

**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 Go - Pilot
- 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. 399)**

The authorizer name.


Pattern: [\w=,@-]+

Request Body

The request accepts the following data in JSON format.

**authorizerFunctionArn (p. 399)**

The ARN of the authorizer's Lambda function.

Type: String

Required: No

**status (p. 399)**

The status of the update authorizer request.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

**tokenKeyName (p. 399)**

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

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

tokenSigningPublicKeys (p. 399)
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. 400)
The authorizer ARN.
Type: String

authorizerName (p. 400)
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateBillingGroup
Service: AWS IoT
Updates information about the billing group.

Request Syntax

```
PATCH /billing-groups/{billingGroupName} HTTP/1.1
Content-type: application/json

{
  "billingGroupProperties": {
    "billingGroupDescription": "string"
  },
  "expectedVersion": number
}
```

URI Request Parameters

The request requires the following URI parameters.

billingGroupName (p. 402)
The name of the billing group.
Pattern: [a-zA-Z0-9_-]+

Request Body

The request accepts the following data in JSON format.

billingGroupProperties (p. 402)
The properties of the billing group.
Type: BillingGroupProperties (p. 502) object

  Required: Yes

expectedVersion (p. 402)
The expected version of the billing group. If the version of the billing group does not match the expected version specified in the request, the UpdateBillingGroup request is rejected with a VersionConflictException.
Type: Long
Required: No

Response Syntax

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

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

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

**version (p. 402)**

The latest version of the billing 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 an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

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 Go - Pilot
- 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.

certificateId (p. 405)
The CA certificate identifier.

Length Constraints: Fixed length of 64.

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

newAutoRegistrationStatus (p. 405)
The new value for the auto registration status. Valid values are: "ENABLE" or "DISABLE".

Valid Values: ENABLE | DISABLE

newStatus (p. 405)
The updated status of the CA certificate.

Note: The status value REGISTER_INACTIVE is deprecated and should not be used.

Valid Values: ACTIVE | INACTIVE

Request Body

The request accepts the following data in JSON format.

registrationConfig (p. 405)
Information about the registration configuration.

Type: RegistrationConfig (p. 571) object

Required: No

removeAutoRegistration (p. 405)
If true, removes 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 Go - Pilot
• 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**

```plaintext
PUT /certificates/certificateId?newStatus=newStatus HTTP/1.1
```

**URI Request Parameters**

The request requires the following URI parameters.

- **certificateId (p. 408)**
  - 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. 408)**
  - 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
**UpdateDynamicThingGroup**

Service: AWS IoT

Updates a dynamic thing group.

**Request Syntax**

```
PATCH /dynamic-thing-groups/thingGroupName HTTP/1.1
Content-type: application/json

{
   "expectedVersion": number,
   "indexName": "string",
   "queryString": "string",
   "queryVersion": "string",
   "thingGroupProperties": {
      "attributePayload": {
         "attributes": {
            "string": "string"
         },
         "merge": boolean
      },
      "thingGroupDescription": "string"
   }
}
```

**URI Request Parameters**

The request requires the following URI parameters.

**thingGroupName (p. 410)**

The name of the dynamic thing group to update.


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

**Request Body**

The request accepts the following data in JSON format.

**expectedVersion (p. 410)**

The expected version of the dynamic thing group to update.

Type: Long

Required: No

**indexName (p. 410)**

The dynamic thing group index to update.

**Note**

Currently one index is supported: 'AWS_Things'.

Type: String

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

**queryString (p. 410)**

The dynamic thing group search query string to update.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**queryVersion (p. 410)**

The dynamic thing group query version to update.

**Note**
Currently one query version is supported: "2017-09-30". If not specified, the query version defaults to this value.

Type: String

Required: No

**thingGroupProperties (p. 410)**

The dynamic thing group properties to update.

Type: **ThingGroupProperties (p. 611)** object

Required: Yes

**Response Syntax**

```json
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. 411)**

The dynamic thing group version.

Type: Long

**Errors**

**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
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429
**VersionConflictException**

An exception thrown when the version of an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

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 Go - Pilot
- 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. 413)**

The new event configuration values.

Type: String to [Configuration (p. 517)](#) object map

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

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 Go - Pilot
- 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

{
  "thingGroupIndexingConfiguration": {
    "thingGroupIndexingMode": "string"
  },
  "thingIndexingConfiguration": {
    "thingConnectivityIndexingMode": "string",
    "thingIndexingMode": "string"
  }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**thingGroupIndexingConfiguration (p. 415)**

- Thing group indexing configuration.
  - Type: ThingGroupIndexingConfiguration (p. 609) object
  - Required: No

**thingIndexingConfiguration (p. 415)**

- Thing indexing configuration.
  - Type: ThingIndexingConfiguration (p. 612) object
  - Required: No

Response Syntax

<table>
<thead>
<tr>
<th>HTTP/1.1 200</th>
</tr>
</thead>
</table>

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateJob
Service: AWS IoT

Updates supported fields of the specified job.

Request Syntax

PATCH /jobs/jobId HTTP/1.1
Content-type: application/json

{
  "abortConfig": {
    "criteriaList": [
      {
        "action": "string",
        "failureType": "string",
        "minNumberOfExecutedThings": number,
        "thresholdPercentage": number
      }
    ],
  },
  "description": "string",
  "jobExecutionsRolloutConfig": {
    "exponentialRate": {
      "baseRatePerMinute": number,
      "incrementFactor": number,
      "rateIncreaseCriteria": {
        "numberOfNotifiedThings": number,
        "numberOfSucceededThings": number
      }
    },
    "maximumPerMinute": number
  },
  "presignedUrlConfig": {
    "expiresInSec": number,
    "roleArn": "string"
  },
  "timeoutConfig": {
    "inProgressTimeoutInMinutes": number
  }
}

URI Request Parameters

The request requires the following URI parameters.

jobId (p. 417)

The ID of the job to be updated.

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

Pattern: [a-zA-Z0-9-_.]+
**abortConfig (p. 417)**

Allows you to create criteria to abort a job.

Type: AbortConfig (p. 474) object

Required: No

**description (p. 417)**

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

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

Required: No

**jobExecutionsRolloutConfig (p. 417)**

Allows you to create a staged rollout of the job.

Type: JobExecutionsRolloutConfig (p. 540) object

Required: No

**presignedUrlConfig (p. 417)**

Configuration information for pre-signed S3 URLs.

Type: PresignedUrlConfig (p. 568) object

Required: No

**timeoutConfig (p. 417)**

Specifies the amount of time each device has to finish its execution of the job. The timer is started when the job execution status is set to IN_PROGRESS. If the job execution status is not set to another terminal state before the time expires, it will be automatically set to TIMED_OUT.

Type: TimeoutConfig (p. 616) 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**

**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 Go - Pilot
- 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. 420)**

The role alias to update.


Pattern: [\w=,@-]+

Request Body

The request accepts the following data in JSON format.

**credentialDurationSeconds (p. 420)**

The number of seconds the credential will be valid.

Type: Integer


Required: No

**roleArn (p. 420)**

The role ARN.

Type: String


Required: No

Response Syntax

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

{
   "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. 420)
The role alias.
Type: String
Pattern: \[\w=,\@-]+

roleAliasArn (p. 420)
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
**UpdateScheduledAudit**

**Service: AWS IoT**

Updates a scheduled audit, including what checks are performed and how often the audit takes place.

**Request Syntax**

```
PATCH /audit/scheduledaudits/scheduledAuditName HTTP/1.1
Content-type: application/json
{
   "dayOfMonth": "string",
   "dayOfWeek": "string",
   "frequency": "string",
   "targetCheckNames": [ "string" ]
}
```

**URI Request Parameters**

The request requires the following URI parameters.

- **scheduledAuditName** *(p. 423)*
  - The name of the scheduled audit. (Max. 128 chars)
  - Pattern: `[a-zA-Z0-9_\-]+`

**Request Body**

The request accepts the following data in JSON format.

- **dayOfMonth** *(p. 423)*
  - The day of the month on which the scheduled audit takes place. Can be "1" through "31" or "LAST". This field is required if the "frequency" parameter is set to "MONTHLY". If days 29-31 are specified, and the month does not have that many days, the audit takes place on the "LAST" day of the month.
  - Type: String
  - Pattern: `^([1-9]|1[2-9]|3[01])$|^LAST$`
  - Required: No

- **dayOfWeek** *(p. 423)*
  - The day of the week on which the scheduled audit takes place. Can be one of "SUN", "MON", "TUE", "WED", "THU", "FRI" or "SAT". This field is required if the "frequency" parameter is set to "WEEKLY" or "BIWEEKLY".
  - Type: String
  - Valid Values: SUN | MON | TUE | WED | THU | FRI | SAT
  - Required: No
frequency (p. 423)

How often the scheduled audit takes place. Can be one of "DAILY", "WEEKLY", "BIWEEKLY" or "MONTHLY". The actual start time of each audit is determined by the system.

Type: String

Valid Values: DAILY | WEEKLY | BIWEEKLY | MONTHLY

Required: No

targetCheckNames (p. 423)

Which checks are performed during the scheduled audit. Checks must be enabled for your account. (Use DescribeAccountAuditConfiguration to see the list of all checks including those that are enabled or UpdateAccountAuditConfiguration to select which checks are enabled.)

Type: Array of strings

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "scheduledArn": "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.

scheduledAuditArn (p. 424)

The ARN of the scheduled audit.

Type: String

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

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

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

### See Also

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

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

Updates a Device Defender security profile.

Request Syntax
PATCH /security-profiles/securityProfileName?expectedVersion=expectedVersion HTTP/1.1
Content-type: application/json

{ 
  "additionalMetricsToRetain": [ "string" ],
  "alertTargets": {
    "string": {
      "alertTargetArn": "string",
      "roleArn": "string"
    }
  },
  "behaviors": [
    {
      "criteria": {
        "comparisonOperator": "string",
        "consecutiveDatapointsToAlarm": number,
        "consecutiveDatapointsToClear": number,
        "durationSeconds": number,
        "statisticalThreshold": {
          "statistic": "string"
        },
        "value": {
          "cidrs": [ "string" ],
          "count": number,
          "ports": [ number ]
        }
      },
      "metric": "string",
      "name": "string"
    }
  ],
  "deleteAdditionalMetricsToRetain": boolean,
  "deleteAlertTargets": boolean,
  "deleteBehaviors": boolean,
  "securityProfileDescription": "string"
}

URI Request Parameters
The request requires the following URI parameters.

expectedVersion (p. 426)
The expected version of the security profile. A new version is generated whenever the security profile is updated. If you specify a value that is different than the actual version, a VersionConflictException is thrown.

securityProfileName (p. 426)
The name of the security profile you want to update.


Pattern: [a-zA-Z0-9_:–-]+
Request Body

The request accepts the following data in JSON format.

**additionalMetricsToRetain (p. 426)**

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the profile’s `behaviors` but it is also retained for any metric specified here.

Type: Array of strings

Required: No

**alertTargets (p. 426)**

Where the alerts are sent. (Alerts are always sent to the console.)

Type: String to `AlertTarget (p. 481)` object map

Valid Keys: `SNS`

Required: No

**behaviors (p. 426)**

Specifies the behaviors that, when violated by a device (thing), cause an alert.

Type: Array of `Behavior (p. 498)` objects

Array Members: Maximum number of 100 items.

Required: No

**deleteAdditionalMetricsToRetain (p. 426)**

If true, delete all `additionalMetricsToRetain` defined for this security profile. If any `additionalMetricsToRetain` are defined in the current invocation an exception occurs.

Type: Boolean

Required: No

**deleteAlertTargets (p. 426)**

If true, delete all `alertTargets` defined for this security profile. If any `alertTargets` are defined in the current invocation an exception occurs.

Type: Boolean

Required: No

**deleteBehaviors (p. 426)**

If true, delete all `behaviors` defined for this security profile. If any `behaviors` are defined in the current invocation an exception occurs.

Type: Boolean

Required: No

**securityProfileDescription (p. 426)**

A description of the security profile.
Type: String

Length Constraints: Maximum length of 1000.

Pattern: \[\p{Graph}\x20\]*

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "additionalMetricsToRetain": [ "string" ],
  "alertTargets": {
    "string": {
      "alertTargetArn": "string",
      "roleArn": "string"
    }
  },
  "behaviors": [
    {
      "criteria": {
        "comparisonOperator": "string",
        "consecutiveDatapointsToAlarm": number,
        "consecutiveDatapointsToClear": number,
        "durationSeconds": number,
        "statisticalThreshold": {
          "statistic": "string"
        },
        "value": {
          "cidrs": [ "string" ],
          "count": number,
          "ports": [ number ]
        }
      },
      "metric": "string",
      "name": "string"
    }
  ],
  "creationDate": number,
  "lastModifiedDate": number,
  "securityProfileArn": "string",
  "securityProfileDescription": "string",
  "securityProfileName": "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.

`additionalMetricsToRetain (p. 428)`

A list of metrics whose data is retained (stored). By default, data is retained for any metric used in the security profile's behaviors but it is also retained for any metric specified here.

Type: Array of strings
alertTargets (p. 428)

Where the alerts are sent. (Alerts are always sent to the console.)

Type: String to AlertTarget (p. 481) object map

Valid Keys: SNS

behaviors (p. 428)

Specifies the behaviors that, when violated by a device (thing), cause an alert.

Type: Array of Behavior (p. 498) objects

Array Members: Maximum number of 100 items.

creationDate (p. 428)

The time the security profile was created.

Type: Timestamp

lastModifiedDate (p. 428)

The time the security profile was last modified.

Type: Timestamp

securityProfileArn (p. 428)

The ARN of the security profile that was updated.

Type: String

securityProfileDescription (p. 428)

The description of the security profile.

Type: String

Length Constraints: Maximum length of 1000.

Pattern: \p{Graph}\x20]*

securityProfileName (p. 428)

The name of the security profile that was updated.

Type: String


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

version (p. 428)

The updated version of the security profile.

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 an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

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 Go - Pilot
- 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

```
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. 431)**

The stream ID.


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

Request Body

The request accepts the following data in JSON format.

**description (p. 431)**

The description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

Required: No

**files (p. 431)**

The files associated with the stream.

Type: Array of StreamFile (p. 595) objects
Array Members: Minimum number of 1 item. Maximum number of 50 items.

Required: No

**roleArn (p. 431)**

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. 432)**

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

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

**streamArn (p. 432)**

The stream ARN.

Type: String

**streamId (p. 432)**

The stream ID.

Type: String


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

**streamVersion (p. 432)**

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 Go - Pilot
- 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

```plaintext
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. 434)**

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. 434)**

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. 483) object

- Required: No

**expectedVersion (p. 434)**

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. 434)

Remove a thing type association. If true, the association is removed.

Type: Boolean
Required: No

thingTypeName (p. 434)

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 an entity specified with the `expectedVersion` parameter does not match the latest version in the system.

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 Go - Pilot
- 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

```bash
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. 437)**

The thing group to update.

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

Request Body

The request accepts the following data in JSON format.

**expectedVersion (p. 437)**

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. 437)**

The thing group properties.

- Type: ThingGroupProperties (p. 611) 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. 437)

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 an entity specified with the expectedVersion parameter does not match the latest version in the system.
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 Go - Pilot
- 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

{
   "overrideDynamicGroups": boolean,
   "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.

overrideDynamicGroups (p. 440)

Override dynamic thing groups with static thing groups when 10-group limit is reached. If a thing belongs to 10 thing groups, and one or more of those groups are dynamic thing groups, adding a thing to a static group removes the thing from the last dynamic group.

Type: Boolean

Required: No

thingGroupsToAdd (p. 440)

The groups to which the thing will be added.

Type: Array of strings


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

Required: No

thingGroupsToRemove (p. 440)

The groups from which the thing will be removed.

Type: Array of strings


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

Required: No

thingName (p. 440)

The thing whose group memberships will be updated.
UpdateThingGroupsForThing

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ValidateSecurityProfileBehaviors

Service: AWS IoT

Validates a Device Defender security profile behaviors specification.

Request Syntax

POST /security-profile-behaviors/validate HTTP/1.1
Content-type: application/json

{
    "behaviors": [
        {
            "criteria": {
                "comparisonOperator": "string",
                "consecutiveDatapointsToAlarm": number,
                "consecutiveDatapointsToClear": number,
                "durationSeconds": number,
                "statisticalThreshold": {
                    "statistic": "string"
                },
                "value": {
                    "cidrs": [ "string" ],
                    "count": number,
                    "ports": [ number ]
                }
            },
            "metric": "string",
            "name": "string"
        }
    ]
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

behaviors (p. 443)

Specifies the behaviors that, when violated by a device (thing), cause an alert.

Type: Array of Behavior (p. 498) objects

Array Members: Maximum number of 100 items.

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "valid": boolean,
}
"validationErrors": [  
  {  
    "errorMessage": "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.

**valid (p. 443)**

True if the behaviors were valid.

Type: Boolean

**validationErrors (p. 443)**

The list of any errors found in the behaviors.

Type: Array of ValidationException (p. 625) objects

**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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
AWS IoT Data Plane

The following actions are supported by AWS IoT Data Plane:

- DeleteThingShadow (p. 446)
- GetThingShadow (p. 448)
- Publish (p. 450)
- UpdateThingShadow (p. 452)
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. 446)

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. 446)

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 Go - Pilot
- 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. 448)

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. 448)

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.

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- 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. 450)**
  - The Quality of Service (QoS) level.
  - Valid Range: Minimum value of 0. Maximum value of 1.

- **topic (p. 450)**
  - The name of the MQTT topic.

Request Body
The request accepts the following binary data.

- **payload (p. 450)**
  - 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 Go - Pilot
- 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. 452)**

The name of the thing.


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

Request Body

The request accepts the following binary data.

**payload (p. 452)**

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. 452)**

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
AWS IoT Jobs Data Plane

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

- DescribeJobExecution (p. 455)
- GetPendingJobExecutions (p. 458)
- StartNextPendingJobExecution (p. 461)
- UpdateJobExecution (p. 464)
**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. 455)**
  
  Optional. A number that identifies a particular job execution on a particular device. If not specified, the latest job execution is returned.

- **includeJobDocument (p. 455)**
  
  Optional. Unless set to false, the response contains the job document. The default is true.

- **jobId (p. 455)**
  
  The unique identifier assigned to this job when it was created.

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

- **thingName (p. 455)**
  
  The thing name associated with the device the job execution is running on.


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

**Request Body**

The request does not have a request body.

**Response Syntax**

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

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

455
"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. 455)

Contains data about a job execution.

Type: JobExecution (p. 628) object

Errors

CertificateValidationException

The certificate is invalid.

HTTP Status Code: 400

InvalidRequestException

The contents of the request were 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

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 Go - Pilot
- 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. 458)

The name of the thing that is executing the job.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "inProgressJobs": [
        {
            "executionNumber": number, 
            "jobId": "string", 
            "lastUpdatedAt": number,
            "queuedAt": number, 
            "startedAt": number, 
            "versionNumber": number
        }
    ], 
    "queuedJobs": [
        {
            "executionNumber": number, 
            "jobId": "string", 
            "lastUpdatedAt": number,
            "queuedAt": number, 
            "startedAt": number, 
            "versionNumber": number
        }
    ]
}

Response Elements

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

**inProgressJobs (p. 458)**

A list of JobExecutionSummary objects with status IN_PROGRESS.

Type: Array of JobExecutionSummary (p. 632) objects

**queuedJobs (p. 458)**

A list of JobExecutionSummary objects with status QUEUED.

Type: Array of JobExecutionSummary (p. 632) objects

**Errors**

**CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

**InvalidRequestException**

The contents of the request were 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

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- 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"
  },
  "stepTimeoutInMinutes": number
}
```

URI Request Parameters

The request requires the following URI parameters.

**thingName (p. 461)**

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. 461)**

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

**stepTimeoutInMinutes (p. 461)**

Specifies the amount of time this device has to finish execution of this job. If the job execution status is not set to a terminal state before this timer expires, or before the timer is reset (by calling UpdateJobExecution, setting the status to IN_PROGRESS, and specifying a new timeout value in field stepTimeoutInMinutes) the job execution status will be automatically set to TIMED_OUT.

Note that setting the step timeout has no effect on the in progress timeout that may have been specified when the job was created (CreateJob using field timeoutConfig).
Valid values for this parameter range from 1 to 10080 (1 minute to 7 days).

Type: Long  
Required: No

Response Syntax

HTTP/1.1 200  
Content-type: application/json

```
{
  "execution": {
    "approximateSecondsBeforeTimedOut": number,
    "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. 462)**

A JobExecution object.

Type: JobExecution (p. 628) object

Errors

**CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

**InvalidRequestException**

The contents of the request were 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

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- 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

```plaintext
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"
    },
    "StepTimeoutInMinutes": number
}
```

URI Request Parameters

The request requires the following URI parameters.

**jobId (p. 464)**

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. 464)**

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. 464)**

Optional. A number that identifies a particular job execution on a particular device.

Type: Long

Required: No

**expectedVersion (p. 464)**

Optional. The expected current version of the job execution. Each time you update the job execution, its version is incremented. If the version of the job execution stored in Jobs does not match, the update is rejected with a VersionMismatch error, and an ErrorResponse that contains the
current job execution status data is returned. (This makes it unnecessary to perform a separate
DescribeJobExecution request in order to obtain the job execution status data.)

Type: Long
Required: No

**includeJobDocument (p. 464)**

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

Type: Boolean
Required: No

**includeJobExecutionState (p. 464)**

Optional. When included and set to true, the response contains the JobExecutionState data. The
default is false.

Type: Boolean
Required: No

**status (p. 464)**

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 | TIMED_OUT | REJECTED |
| REMOVED | CANCELED
Required: Yes

**statusDetails (p. 464)**

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

**stepTimeoutInMinutes (p. 464)**

Specifies the amount of time this device has to finish execution of this job. If the job execution status
is not set to a terminal state before this timer expires, or before the timer is reset (by again calling
UpdateJobExecution, setting the status to IN_PROGRESS, and specifying a new timeout value
in this field) the job execution status will be automatically set to TIMED_OUT. Note that setting or
resetting the step timeout has no effect on the in progress timeout that may have been specified
when the job was created (CreateJob using field timeoutConfig).

Valid values for this parameter range from 1 to 10080 (1 minute to 7 days). A value of -1 is also valid
and will cancel the current step timer (created by an earlier use of UpdateJobExecutionRequest).
Response Syntax

```
HTTP/1.1 200
Content-type: application/json
{
  "executionState": {
    "status": "string",
    "statusDetails": {
      "string": "string"
    },
    "versionNumber": number
  },
  "jobDocument": "string"
}
```

Response Elements

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

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

**executionState (p. 466)**

A JobExecutionState object.

Type: JobExecutionState (p. 631) object

**jobDocument (p. 466)**

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.

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 Go - Pilot
- 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:

- AbortConfig (p. 474)
- AbortCriteria (p. 475)
- Action (p. 476)
- ActiveViolation (p. 479)
- AlertTarget (p. 481)
- Allowed (p. 482)
- AttributePayload (p. 483)
- AuditCheckConfiguration (p. 484)
- AuditCheckDetails (p. 485)
- AuditFinding (p. 487)
- AuditNotificationTarget (p. 489)
- AuditTaskMetadata (p. 490)
- AuthInfo (p. 491)
- AuthorizerDescription (p. 492)
- AuthorizerSummary (p. 494)
- AuthResult (p. 495)
- AwsJobExecutionsRolloutConfig (p. 497)
- Behavior (p. 498)
- BehaviorCriteria (p. 499)
- BillingGroupMetadata (p. 501)
- BillingGroupProperties (p. 502)
- CACertificate (p. 503)
- CACertificateDescription (p. 504)
- Certificate (p. 506)
- CertificateDescription (p. 507)
- CertificateValidity (p. 510)
- CloudwatchAlarmAction (p. 511)
- CloudwatchMetricAction (p. 512)
- CodeSigning (p. 514)
- CodeSigningCertificateChain (p. 515)
- CodeSigningSignature (p. 516)
- Configuration (p. 517)
- CustomCodeSigning (p. 518)
- Denied (p. 519)
- Destination (p. 520)
- DynamoDBAction (p. 521)
- DynamoDBv2Action (p. 523)
- EffectivePolicy (p. 524)
- ElasticsearchAction (p. 525)
- ErrorInfo (p. 526)
- ExplicitDeny (p. 527)
- ExponentialRolloutRate (p. 528)
- FileLocation (p. 529)
- FirehoseAction (p. 530)
- GroupNameAndArn (p. 531)
- ImplicitDeny (p. 532)
- IotAnalyticsAction (p. 533)
- IotEventsAction (p. 534)
- Job (p. 535)
- JobExecution (p. 538)
- JobExecutionsRolloutConfig (p. 540)
- JobExecutionStatusDetails (p. 541)
- JobExecutionSummary (p. 542)
- JobExecutionSummaryForJob (p. 544)
- JobExecutionSummaryForThing (p. 545)
- JobProcessDetails (p. 546)
- JobSummary (p. 548)
- KeyPair (p. 550)
- KinesisAction (p. 551)
- LambdaAction (p. 552)
- LoggingOptionsPayload (p. 553)
- LogTarget (p. 554)
- LogTargetConfiguration (p. 555)
- MetricValue (p. 556)
- NonCompliantResource (p. 557)
- OTAUpdateFile (p. 558)
- OTAUpdateInfo (p. 559)
- OTAUpdateSummary (p. 562)
- OutgoingCertificate (p. 563)
- Policy (p. 565)
- PolicyVersion (p. 566)
- PolicyVersionIdentifier (p. 567)
- PresignedUrlConfig (p. 568)
- PutItemInput (p. 569)
- RateIncreaseCriteria (p. 570)
- RegistrationConfig (p. 571)
- RelatedResource (p. 572)
- RepublishAction (p. 573)
- ResourceIdentifier (p. 574)
- RoleAliasDescription (p. 576)
- S3Action (p. 578)
- S3Destination (p. 579)
- S3Location (p. 580)
- SalesforceAction (p. 581)
- ScheduledAuditMetadata (p. 582)
The following data types are supported by AWS IoT Data Plane:

The following data types are supported by AWS IoT Jobs Data Plane:

The following data types are supported by AWS IoT:
• AbortConfig (p. 474)
• AbortCriteria (p. 475)
• Action (p. 476)
• ActiveViolation (p. 479)
• AlertTarget (p. 481)
• Allowed (p. 482)
• AttributePayload (p. 483)
• AuditCheckConfiguration (p. 484)
• AuditCheckDetails (p. 485)
• AuditFinding (p. 487)
• AuditNotificationTarget (p. 489)
• AuditTaskMetadata (p. 490)
• AuthInfo (p. 491)
• AuthorizerDescription (p. 492)
• AuthorizerSummary (p. 494)
• AuthResult (p. 495)
• AwsJobExecutionsRolloutConfig (p. 497)
• Behavior (p. 498)
• BehaviorCriteria (p. 499)
• BillingGroupMetadata (p. 501)
• BillingGroupProperties (p. 502)
• CACertificate (p. 503)
• CACertificateDescription (p. 504)
• Certificate (p. 506)
• CertificateDescription (p. 507)
• CertificateValidity (p. 510)
• CloudwatchAlarmAction (p. 511)
• CloudwatchMetricAction (p. 512)
• CodeSigning (p. 514)
• CodeSigningCertificateChain (p. 515)
• CodeSigningSignature (p. 516)
• Configuration (p. 517)
• CustomCodeSigning (p. 518)
• Denied (p. 519)
• Destination (p. 520)
• DynamoDBAction (p. 521)
• DynamoDBv2Action (p. 523)
• EffectivePolicy (p. 524)
• ElasticsearchAction (p. 525)
• ErrorInfo (p. 526)
• ExplicitDeny (p. 527)
• ExponentialRolloutRate (p. 528)
• FileLocation (p. 529)
• FirehoseAction (p. 530)
• GroupNameAndArn (p. 531)
• ImplicitDeny (p. 532)
• IotAnalyticsAction (p. 533)
• IotEventsAction (p. 534)
• Job (p. 535)
• JobExecution (p. 538)
• JobExecutionsRolloutConfig (p. 540)
• JobExecutionStatusDetails (p. 541)
• JobExecutionSummary (p. 542)
• JobExecutionSummaryForJob (p. 544)
• JobExecutionSummaryForThing (p. 545)
• JobProcessDetails (p. 546)
• JobSummary (p. 548)
• KeyPair (p. 550)
• KinesisAction (p. 551)
• LambdaAction (p. 552)
• LoggingOptionsPayload (p. 553)
• LogTarget (p. 554)
• LogTargetConfiguration (p. 555)
• MetricValue (p. 556)
• NonCompliantResource (p. 557)
• OTAUpdateFile (p. 558)
• OTAUpdateInfo (p. 559)
• OTAUpdateSummary (p. 562)
• OutgoingCertificate (p. 563)
• Policy (p. 565)
• PolicyVersion (p. 566)
• PolicyVersionIdentifier (p. 567)
• PresignedUrlConfig (p. 568)
• PutItemInput (p. 569)
• RateIncreaseCriteria (p. 570)
• RegistrationConfig (p. 571)
• RelatedResource (p. 572)
• RepublishAction (p. 573)
• ResourceIdentifier (p. 574)
• RoleAliasDescription (p. 576)
• S3Action (p. 578)
• S3Destination (p. 579)
• S3Location (p. 580)
• SalesforceAction (p. 581)
• ScheduledAuditMetadata (p. 582)
• SecurityProfileIdentifier (p. 584)
• SecurityProfileTarget (p. 585)
• SecurityProfileTargetMapping (p. 586)
• SigningProfileParameter (p. 587)
• SnsAction (p. 588)
• SqSAction (p. 589)
• StartSigningJobParameter (p. 590)
• StatisticalThreshold (p. 591)
• Statistics (p. 592)
• StepFunctionsAction (p. 593)
• Stream (p. 594)
• StreamFile (p. 595)
• StreamInfo (p. 596)
• StreamSummary (p. 598)
• Tag (p. 599)
• TaskStatistics (p. 600)
• ThingAttribute (p. 602)
• ThingConnectivity (p. 604)
• ThingDocument (p. 605)
• ThingGroupDocument (p. 607)
• ThingGroupIndexingConfiguration (p. 609)
• ThingGroupMetadata (p. 610)
• ThingGroupProperties (p. 611)
• ThingIndexingConfiguration (p. 612)
• ThingTypeDefinition (p. 613)
• ThingTypeMetadata (p. 614)
• ThingTypeProperties (p. 615)
• TimeoutConfig (p. 616)
• TopicRule (p. 617)
• TopicRuleListItem (p. 619)
• TopicRulePayload (p. 621)
• TransferData (p. 623)
• ValidationError (p. 625)
• ViolationEvent (p. 626)
AbortConfig
Service: AWS IoT

Details of abort criteria to abort the job.

Contents

criteriaList

The list of abort criteria to define rules to abort the job.

Type: Array of AbortCriteria (p. 475) objects

Array Members: Minimum number of 1 item.

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
AbortCriteria
Service: AWS IoT
Details of abort criteria to define rules to abort the job.

Contents

action
The type of abort action to initiate a job abort.
Type: String
Valid Values: CANCEL
Required: Yes

failureType
The type of job execution failure to define a rule to initiate a job abort.
Type: String
Valid Values: FAILED | REJECTED | TIMED_OUT | ALL
Required: Yes

minNumberOfExecutedThings
Minimum number of executed things before evaluating an abort rule.
Type: Integer
Valid Range: Minimum value of 1.
Required: Yes

thresholdPercentage
The threshold as a percentage of the total number of executed things that will initiate a job abort.
AWS IoT supports up to two digits after the decimal (for example, 10.9 and 10.99, but not 10.999).
Type: Double
Valid Range: Maximum value of 100.
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
### Action
Service: AWS IoT

Describes the actions associated with a rule.

### Contents

**cloudwatchAlarm**
Change the state of a CloudWatch alarm.
Type: `CloudwatchAlarmAction (p. 511)` object
Required: No

**cloudwatchMetric**
Capture a CloudWatch metric.
Type: `CloudwatchMetricAction (p. 512)` object
Required: No

**dynamoDB**
Write to a DynamoDB table.
Type: `DynamoDBAction (p. 521)` 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. 523)` object
Required: No

**elasticsearch**
Write data to an Amazon Elasticsearch Service domain.
Type: `ElasticsearchAction (p. 525)` object
Required: No

**firehose**
Write to an Amazon Kinesis Firehose stream.
Type: `FirehoseAction (p. 530)` object
Required: No

**iotAnalytics**
Sends message data to an AWS IoT Analytics channel.
Type: `iotAnalyticsAction (p. 533)` object
Required: No
iotEvents
Sends an input to an AWS IoT Events detector.
Type: iotEventsAction (p. 534) object
Required: No

kinesis
Write data to an Amazon Kinesis stream.
Type: KinesisAction (p. 551) object
Required: No

lambda
Invoke a Lambda function.
Type: LambdaAction (p. 552) object
Required: No

republish
Publish to another MQTT topic.
Type: RepublishAction (p. 573) object
Required: No

s3
Write to an Amazon S3 bucket.
Type: S3Action (p. 578) object
Required: No

salesforce
Send a message to a Salesforce IoT Cloud Input Stream.
Type: SalesforceAction (p. 581) object
Required: No

sns
Publish to an Amazon SNS topic.
Type: SnsAction (p. 588) object
Required: No

sqs
Publish to an Amazon SQS queue.
Type: SqsAction (p. 589) object
Required: No

stepFunctions
Starts execution of a Step Functions state machine.
Type: StepFunctionsAction (p. 593) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
ActiveViolation

Service: AWS IoT

Information about an active Device Defender security profile behavior violation.

Contents

**behavior**

The behavior which is being violated.

Type: Behavior (p. 498) object

Required: No

**lastViolationTime**

The time the most recent violation occurred.

Type: Timestamp

Required: No

**lastViolationValue**

The value of the metric (the measurement) which caused the most recent violation.

Type: MetricValue (p. 556) object

Required: No

**securityProfileName**

The security profile whose behavior is in violation.

Type: String


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

Required: No

**thingName**

The name of the thing responsible for the active violation.

Type: String


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

Required: No

**violationId**

The ID of the active violation.

Type: String


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

**violationStartTime**

The time the violation started.

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
AlertTarget

Service: AWS IoT

A structure containing the alert target ARN and the role ARN.

Contents

alertTargetArn
The ARN of the notification target to which alerts are sent.
Type: String
Required: Yes

roleArn
The ARN of the role that grants permission to send alerts to the notification target.
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 Go - Pilot
- 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. 565) 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 Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
AuditCheckConfiguration
Service: AWS IoT

Which audit checks are enabled and disabled for this account.

Contents

calendar

enabled

True if this audit check is enabled for this account.

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
AuditCheckDetails
Service: AWS IoT

Information about the audit check.

Contents

checkCompliant

True if the check completed and found all resources compliant.

Type: Boolean
Required: No

checkRunStatus

The completion status of this check, one of "IN_PROGRESS", "WAITING_FOR_DATA_COLLECTION", "CANCELED", "COMPLETED_COMPLIANT", "COMPLETED_NON_COMPLIANT", or "FAILED".

Type: String
Valid Values: IN_PROGRESS | WAITING_FOR_DATA_COLLECTION | CANCELED | COMPLETED_COMPLIANT | COMPLETED_NON_COMPLIANT | FAILED
Required: No

errorCode

The code of any error encountered when performing this check during this audit. One of "INSUFFICIENT_PERMISSIONS", or "AUDIT_CHECK_DISABLED".

Type: String
Required: No

message

The message associated with any error encountered when performing this check during this audit.

Type: String
Length Constraints: Maximum length of 2048.
Required: No

nonCompliantResourcesCount

The number of resources that the check found non-compliant.

Type: Long
Required: No

totalResourcesCount

The number of resources on which the check was performed.

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
AuditFinding

Service: AWS IoT

The findings (results) of the audit.

Contents

checkName

The audit check that generated this result.

Type: String

Required: No

findingTime

The time the result (finding) was discovered.

Type: Timestamp

Required: No

nonCompliantResource

The resource that was found to be non-compliant with the audit check.

Type: NonCompliantResource (p. 557) object

Required: No

reasonForNonCompliance

The reason the resource was non-compliant.

Type: String

Required: No

reasonForNonComplianceCode

A code which indicates the reason that the resource was non-compliant.

Type: String

Required: No

relatedResources

The list of related resources.

Type: Array of RelatedResource (p. 572) objects

Required: No

severity

The severity of the result (finding).

Type: String

Valid Values: CRITICAL | HIGH | MEDIUM | LOW

Required: No
taskId

The ID of the audit that generated this result (finding)

Type: String


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

Required: No

taskStartTime

The time the audit started.

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
AuditNotificationTarget
Service: AWS IoT

Information about the targets to which audit notifications are sent.

Contents

enabled
True if notifications to the target are enabled.
Type: Boolean
Required: No

roleArn
The ARN of the role that grants permission to send notifications to the target.
Type: String
Required: No

targetArn
The ARN of the target (SNS topic) to which audit notifications are sent.
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
AuditTaskMetadata
Service: AWS IoT

The audits that were performed.

Contents

taskId
The ID of this audit.

Type: String


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

Required: No

taskStatus
The status of this audit: one of "IN_PROGRESS", "COMPLETED", "FAILED" or "CANCELED".

Type: String

Valid Values: IN_PROGRESS | COMPLETED | FAILED | CANCELED

Required: No

taskType
The type of this audit: one of "ON_DEMAND_AUDIT_TASK" or "SCHEDULED_AUDIT_TASK".

Type: String

Valid Values: ON_DEMAND_AUDIT_TASK | SCHEDULED_AUDIT_TASK

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 Go - Pilot
- 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 Go - Pilot
- 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 Go - Pilot
- 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 Go - Pilot
- 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. 482)` 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. 491)` object

Required: No

**denied**

The policies and statements that denied the specified action.

Type: `Denied (p. 519)` 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
AuthResult
**AwsJobExecutionsRolloutConfig**

Service: AWS IoT

Configuration for the rollout of OTA updates.

**Contents**

**maximumPerMinute**

The maximum number of OTA update job executions started per minute.

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
Behavior

Service: AWS IoT

A Device Defender security profile behavior.

Contents

criteria

The criteria that determine if a device is behaving normally in regard to the metric.

Type: BehaviorCriteria (p. 499) object

Required: No

metric

What is measured by the behavior.

Type: String

Required: No

name

The name you have given to the behavior.

Type: String


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

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
BehaviorCriteria

Service: AWS IoT

The criteria by which the behavior is determined to be normal.

Contents

comparisonOperator

The operator that relates the thing measured (metric) to the criteria (containing a value or statisticalThreshold).

Type: String

Valid Values: less-than | less-than-equals | greater-than | greater-than-equals | in-cidr-set | not-in-cidr-set | in-port-set | not-in-port-set

Required: No

consecutiveDatapointsToAlarm

If a device is in violation of the behavior for the specified number of consecutive datapoints, an alarm occurs. If not specified, the default is 1.

Type: Integer


Required: No

consecutiveDatapointsToClear

If an alarm has occurred and the offending device is no longer in violation of the behavior for the specified number of consecutive datapoints, the alarm is cleared. If not specified, the default is 1.

Type: Integer


Required: No

durationSeconds

Use this to specify the time duration over which the behavior is evaluated, for those criteria which have a time dimension (for example, NUM_MESSAGES_SENT). For a statisticalThreshold metric comparison, measurements from all devices are accumulated over this time duration before being used to calculate percentiles, and later, measurements from an individual device are also accumulated over this time duration before being given a percentile rank.

Type: Integer

Required: No

statisticalThreshold

A statistical ranking (percentile) which indicates a threshold value by which a behavior is determined to be in compliance or in violation of the behavior.

Type: StatisticalThreshold (p. 591) object

Required: No
value

The value to be compared with the metric.

Type: MetricValue (p. 556) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
BillingGroupMetadata
Service: AWS IoT

Additional information about the billing group.

Contents

creationDate

The date the billing group was created.

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
BillingGroupProperties
Service: AWS IoT
The properties of a billing group.

Contents

billingGroupDescription
  The description of the billing group.
  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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
CACertificate

Service: AWS IoT

A CA certificate.

Contents

**certificateArn**

The ARN of the CA certificate.

Type: String

Required: No

**certificateId**

The ID of the CA certificate.

Type: String

Length Constraints: Fixed length of 64.

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

Required: No

**creationDate**

The date the CA certificate was created.

Type: Timestamp

Required: No

**status**

The status of the CA certificate.

The status value REGISTER_INACTIVE is deprecated and should not be used.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- 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-zA-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

Length Constraints: Fixed length of 12.

Pattern: [0-9]+

Required: No

status

The status of a CA certificate.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

validity

When the CA certificate is valid.

Type: CertificateValidity (p. 510) 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 Go - Pilot
- 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 Go - Pilot
- 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

Length Constraints: Fixed length of 12.

Pattern: `[0-9]+`

Required: No

**previousOwnedBy**

The ID of the AWS account of the previous owner of the certificate.

Type: String

Length Constraints: Fixed length of 12.

Pattern: `[0-9]+`

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. 623) object

Required: No

**validity**

When the certificate is valid.

Type: CertificateValidity (p. 510) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
CertificateValidity
Service: AWS IoT
When the certificate is valid.

Contents

notAfter
The certificate is not valid after this date.
Type: Timestamp
Required: No

notBefore
The certificate is not valid before this date.
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 Go - Pilot
- 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 Go - Pilot
- 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 Go - Pilot
• 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. 518) object
Required: No

startSigningJobParameter
Describes the code-signing job.
Type: StartSigningJobParameter (p. 590) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
AWS IoT API Reference
CodeSigningCertificateChain

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

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 Go - Pilot
- 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

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 Go - Pilot
- 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 Go - Pilot
- 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. 515) 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. 516) 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 Go - Pilot
- 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. 527) 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. 532) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
**Destination**

Service: AWS IoT

Describes the location of the updated firmware.

**Contents**

**s3Destination**

Describes the location in S3 of the updated firmware.

Type: [S3Destination](#) 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 Go - Pilot
- 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 Go - Pilot
- 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 it's 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. 569) object

Required: Yes

roleArn

The ARN of the IAM role that grants access to 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
EffectivePolicy
Service: AWS IoT

The policy that has the effect on the authorization results.

Contents

policyArn

The policy ARN.
Type: String
Required: No

policyDocument

The IAM policy document.
Type: String
Required: No

policyName

The policy name.
Type: String
Pattern: \[\w+=,.@-\]+
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- 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 Go - Pilot
- 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 Go - Pilot
- 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. 565) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
**ExponentialRolloutRate**

Service: AWS IoT

Allows you to create an exponential rate of rollout for a job.

**Contents**

**baseRatePerMinute**

The minimum number of things that will be notified of a pending job, per minute at the start of job rollout. This parameter allows you to define the initial rate of rollout.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

**incrementFactor**

The exponential factor to increase the rate of rollout for a job.

Type: Double


Required: Yes

**rateIncreaseCriteria**

The criteria to initiate the increase in rate of rollout for a job.

AWS IoT supports up to one digit after the decimal (for example, 1.5, but not 1.55).

Type: RateIncreaseCriteria (p. 570) object

Required: Yes

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
FileLocation
Service: AWS IoT
The location of the OTA update.

Contents

s3Location
The location of the updated firmware in S3.
Type: S3Location (p. 580) object
Required: No

stream
The stream that contains the OTA update.
Type: Stream (p. 594) 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 Go - Pilot
- 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 Go - Pilot
- 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 Go - Pilot
- 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. 565) 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 Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
IotEventsAction
Service: AWS IoT

Sends an input to an AWS IoT Events detector.

Contents

inputName
The name of the AWS IoT Events input.
Type: String
Required: Yes

messageId
[Optional] Use this to ensure that only one input (message) with a given messageId will be processed by an AWS IoT Events detector.
Type: String
Length Constraints: Maximum length of 128.
Required: No

roleArn
The ARN of the role that grants AWS IoT permission to send an input to an AWS IoT Events detector. ("Action":"iotevents:BatchPutMessage").
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
Job
Service: AWS IoT

The Job object contains details about a job.

Contents

abortConfig
Configuration for criteria to abort the job.
Type: AbortConfig (p. 474) object
Required: No

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 seconds since the epoch, when the job was completed.
Type: Timestamp
Required: No

createdAt
The time, in seconds 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

forceCanceled
Will be true if the job was canceled with the optional force parameter set to true.
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. 540)](p. 540) 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. 546)](p. 546) object

Required: No

**lastUpdatedAt**

The time, in seconds since the epoch, when the job was last updated.

Type: Timestamp

Required: No

**presignedUrlConfig**

Configuration for pre-signed S3 URLs.

Type: [PresignedUrlConfig (p. 568)](p. 568) object

Required: No

**reasonCode**

If the job was updated, provides the reason code for the update.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `[^\p{Upper}\p{Digit Республика}]`

Required: No

**status**

The status of the job, one of IN_PROGRESS, CANCELED, DELETION_IN_PROGRESS or COMPLETED.

Type: String

Valid Values: IN_PROGRESS | CANCELED | COMPLETED | DELETION_IN_PROGRESS
Job

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

timeoutConfig

Specifies the amount of time each device has to finish its execution of the job. A timer is started when the job execution status is set to IN_PROGRESS. If the job execution status is not set to another terminal state before the timer expires, it will be automatically set to TIMED_OUT.

Type: TimeoutConfig (p. 616) 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 Go - Pilot
- 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

approximateSecondsBeforeTimedOut

The estimated number of seconds that remain before the job execution status will be changed to TIMED_OUT. The timeout interval can be anywhere between 1 minute and 7 days (1 to 10080 minutes). The actual job execution timeout can occur up to 60 seconds later than the estimated duration. This value will not be included if the job execution has reached a terminal status.

Type: Long
Required: No

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

Will be true if the job execution was canceled with the optional force parameter set to true.

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 seconds since the epoch, when the job execution was last updated.

Type: Timestamp
Required: No

queuedAt

The time, in seconds since the epoch, when the job execution was queued.

Type: Timestamp
Required: No
**startedAt**

The time, in seconds since the epoch, when the job execution started.

Type: Timestamp

Required: No

**status**

The status of the job execution (IN_PROGRESS, QUEUED, FAILED, SUCCEEDED, TIMED_OUT, CANCELED, or REJECTED).

Type: String

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

Required: No

**statusDetails**

A collection of name/value pairs that describe the status of the job execution.

Type: JobExecutionStatusDetails (p. 541) object

Required: No

**thingArn**

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

Type: String

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
JobExecutionsRolloutConfig

Service: AWS IoT

Allows you to create a staged rollout of a job.

Contents

**exponentialRate**

The rate of increase for a job rollout. This parameter allows you to define an exponential rate for a job rollout.

Type: [ExponentialRolloutRate](#) (p. 528) object

Required: No

**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.

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 Go - Pilot
- 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 Go - Pilot
- 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 seconds since the epoch, when the job execution was last updated.

Type: Timestamp

Required: No

queuedAt

The time, in seconds since the epoch, when the job execution was queued.

Type: Timestamp

Required: No

startedAt

The time, in seconds 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 | TIMED_OUT | 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 Go - Pilot
- 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. 542) 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 Go - Pilot
- 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. 542) 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 Go - Pilot
- 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

cancelledNumberOfThings
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
numberOfTimedOutThings

The number of things whose job execution status is TIMED_OUT.

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
JobSummary
Service: AWS IoT

The job summary.

Contents

completedAt
The time, in seconds since the epoch, when the job completed.
Type: Timestamp
Required: No

createdAt
The time, in seconds 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 seconds 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 Go - Pilot
- 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 Go - Pilot
- 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 Go - Pilot
- 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 Go - Pilot
- 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 Go - Pilot
- 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 Go - Pilot
- 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. 554) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
MetricValue
Service: AWS IoT

The value to be compared with the metric.

Contents

cids
If the comparisonOperator calls for a set of CIDRs, use this to specify that set to be compared with the metric.

Type: Array of strings


Pattern: [a-zA-F0-9:\./]+

Required: No

count
If the comparisonOperator calls for a numeric value, use this to specify that numeric value to be compared with the metric.

Type: Long

Valid Range: Minimum value of 0.

Required: No

ports
If the comparisonOperator calls for a set of ports, use this to specify that set to be compared with the metric.

Type: Array of integers

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
NonCompliantResource

Service: AWS IoT

Information about the resource that was non-compliant with the audit check.

Contents

additionalInfo

Additional information about the non-compliant resource.
Type: String to string map
Required: No

resourceIdentifier

Information identifying the non-compliant resource.
Type: ResourceIdentifier (p. 574) object
Required: No

resourceType

The type of the non-compliant resource.
Type: String
Valid Values: DEVICE_CERTIFICATE | CA_CERTIFICATE | IOT_POLICY | COGNITO_IDENTITY_POOL | CLIENT_ID | ACCOUNT_SETTINGS
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 Go - Pilot
- 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. 514) object
Required: No

fileLocation
The location of the updated firmware.
Type: FileLocation (p. 529) object
Required: No

fileName
The name of the file.
Type: String
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 Go - Pilot
- 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

awsJobExecutionsRolloutConfig
Configuration for the rollout of OTA updates.
Type: AwsJobExecutionsRolloutConfig (p. 497) object
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. 526) object
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. 558) objects
Array Members: Minimum number of 1 item. Maximum number of 50 items.
Required: No
otaUpdateId
The OTA update ID.
Type: String
Pattern: [a-zA-Z0-9_-]+
Required: No
otaUpdateStatus
The status of the OTA update.
Type: String
Valid Values: CREATE_PENDING | CREATE_IN_PROGRESS | CREATE_COMPLETE | CREATE_FAILED
Required: No
targets
The targets of the OTA update.
Type: Array of strings
Array Members: Minimum number of 1 item.
Required: No
targetSelection
 Specifies whether the OTA update will continue to run (CONTINUOUS), or will be complete after all those things specified as targets have completed the OTA update (SNAPSHOT). If continuous, the OTA update may also be run on a thing when a change is detected in a target. For example, an OTA
update will run on a thing when the thing is added to a target group, even after the OTA update was completed by all things originally in the group.

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
OutgoingCertificate
Service: AWS IoT

A certificate that has been transferred but not yet accepted.

Contents

certificateArn
  The certificate ARN.
  Type: String
  Required: No

certificateId
  The certificate ID.
  Type: String
  Length Constraints: Fixed length of 64.
  Pattern: (0x)?[a-zA-F0-9]+
  Required: No

creationDate
  The certificate creation date.
  Type: Timestamp
  Required: No

transferDate
  The date the transfer was initiated.
  Type: Timestamp
  Required: No

transferMessage
  The transfer message.
  Type: String
  Length Constraints: Maximum length of 128.
  Required: No

transferredTo
  The AWS account to which the transfer was made.
  Type: String
  Length Constraints: Fixed length of 12.
  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 Go - Pilot
- 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 Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
PolicyVersionIdentifier
Service: AWS IoT

Information about the version of the policy associated with the resource.

Contents

policyName
The name of the policy.
Type: String
Pattern: [\w+=,.@-]+
Required: No

policyVersionId
The ID of the version of the policy associated with the resource.
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 Go - Pilot
- 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 Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
RateIncreaseCriteria  
Service: AWS IoT  
Allows you to define a criteria to initiate the increase in rate of rollout for a job.

Contents

numberOfNotifiedThings

The threshold for number of notified things that will initiate the increase in rate of rollout.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

numberOfSucceededThings

The threshold for number of succeeded things that will initiate the increase in rate of rollout.

Type: Integer

Valid Range: Minimum value 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 Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
RelatedResource
Service: AWS IoT

Information about a related resource.

Contents

additionalInfo

Additional information about the resource.

Type: String to string map

Required: No

resourceIdentifier

Information identifying the resource.

Type: ResourceIdentifier (p. 574) object

Required: No

resourceType

The type of resource.

Type: String

Valid Values:
- DEVICE_CERTIFICATE
- CA_CERTIFICATE
- IOT_POLICY
- COGNITO_IDENTITY_POOL
- CLIENT_ID
- ACCOUNT_SETTINGS

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 Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
ResourceIdentifier

Service: AWS IoT

Information identifying the non-compliant resource.

Contents

account

The account with which the resource is associated.

Type: String

Length Constraints: Fixed length of 12.

Pattern: [0-9]+

Required: No

certificateId

The ID of the CA certificate used to authorize the certificate.

Type: String

Length Constraints: Fixed length of 64.

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

Required: No

cognitoIdentityPoolId

The ID of the Cognito Identity Pool.

Type: String

Required: No

deviceCertificateId

The ID of the certificate attached to the resource.

Type: String

Length Constraints: Fixed length of 64.

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

Required: No

policyVersionIdentifier

The version of the policy associated with the resource.

Type: PolicyVersionIdentifier (p. 567) 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 Go - Pilot
- 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
Length Constraints: Fixed length of 12.
Pattern: [0-9]+
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 Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
S3Destination
Service: AWS IoT

Describes the location of updated firmware in S3.

Contents

bucket

The S3 bucket that contains the updated firmware.
Type: String
Length Constraints: Minimum length of 1.
Required: No

prefix

The S3 prefix.
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
S3Location
Service: AWS IoT

The S3 location.

Contents

bucket
The S3 bucket.
Type: String
Length Constraints: Minimum length of 1.
Required: No

key
The S3 key.
Type: String
Length Constraints: Minimum length of 1.
Required: No

version
The S3 bucket 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 Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
**ScheduledAuditMetadata**

Service: AWS IoT

Information about the scheduled audit.

**Contents**

**dayOfMonth**

The day of the month on which the scheduled audit is run (if the frequency is "MONTHLY"). If days 29-31 are specified, and the month does not have that many days, the audit takes place on the "LAST" day of the month.

Type: String

Pattern: ^([1-9]|12)[0-9]|3[01])$|^LAST$

Required: No

**dayOfWeek**

The day of the week on which the scheduled audit is run (if the frequency is "WEEKLY" or "BIWEEKLY").

Type: String

Valid Values: SUN | MON | TUE | WED | THU | FRI | SAT

Required: No

**frequency**

How often the scheduled audit takes place.

Type: String

Valid Values: DAILY | WEEKLY | BIWEEKLY | MONTHLY

Required: No

**scheduledAuditArn**

The ARN of the scheduled audit.

Type: String

Required: No

**scheduledAuditName**

The name of the scheduled audit.

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 Go - Pilot
• AWS SDK for Java
• AWS SDK for Ruby V2
SecurityProfileIdentifier

Service: AWS IoT

Identifying information for a Device Defender security profile.

Contents

**arn**

The ARN of the security profile.

Type: String

Required: Yes

**name**

The name you have given to the security profile.

Type: String


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

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
SecurityProfileTarget
Service: AWS IoT

A target to which an alert is sent when a security profile behavior is violated.

Contents

arn

The ARN of the security profile.

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
SecurityProfileTargetMapping
Service: AWS IoT

Information about a security profile and the target associated with it.

Contents

securityProfileIdentifier
Information that identifies the security profile.
Type: SecurityProfileIdentifier (p. 584) object
Required: No

target
Information about the target (thing group) associated with the security profile.
Type: SecurityProfileTarget (p. 585) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
SigningProfileParameter
Service: AWS IoT

Describes the code-signing profile.

Contents

certificateArn
Certificate ARN.
Type: String
Required: No

certificatePathOnDevice
The location of the code-signing certificate on your device.
Type: String
Required: No

platform
The hardware platform of your device.
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 Go - Pilot
- 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
(Optional) The message format of the message to publish. 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 Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
StartSigningJobParameter
Service: AWS IoT

Information required to start a signing job.

Contents

destination
The location to write the code-signed file.
Type: Destination (p. 520) object
Required: No

signingProfileName
The code-signing profile name.
Type: String
Required: No

signingProfileParameter
Describes the code-signing profile.
Type: SigningProfileParameter (p. 587) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
StatisticalThreshold
Service: AWS IoT

A statistical ranking (percentile) which indicates a threshold value by which a behavior is determined to be in compliance or in violation of the behavior.

Contents

statistic

The percentile which resolves to a threshold value by which compliance with a behavior is determined. Metrics are collected over the specified period (durationSeconds) from all reporting devices in your account and statistical ranks are calculated. Then, the measurements from a device are collected over the same period. If the accumulated measurements from the device fall above or below (comparisonOperator) the value associated with the percentile specified, then the device is considered to be in compliance with the behavior, otherwise a violation occurs.

Type: String

Pattern: (p0|p0\.1|p0\.01|p1|p10|p50|p90|p99|p99\.9|p99\.99|p100)

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
Statistics
Service: AWS IoT

A map of key-value pairs for all supported statistics. Currently, only count is supported.

Contents

count

The count of things that match the query.
Type: Integer
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
StepFunctionsAction
Service: AWS IoT

Starts execution of a Step Functions state machine.

Contents

executionNamePrefix
(Optional) A name will be given to the state machine execution consisting of this prefix followed by a UUID. Step Functions automatically creates a unique name for each state machine execution if one is not provided.

Type: String
Required: No

roleArn
The ARN of the role that grants IoT permission to start execution of a state machine ("Action":"states:StartExecution").

Type: String
Required: Yes

stateMachineName
The name of the Step Functions state machine whose execution will be started.

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 Go - Pilot
- 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 Go - Pilot
- 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. 580) 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 Go - Pilot
- 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. 595) objects
Array Members: Minimum number of 1 item. Maximum number of 50 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 Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
Tag
Service: AWS IoT
A set of key/value pairs that are used to manage the resource.

Contents

Key
The tag's key.
Type: String
Required: No

Value
The tag's value.
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
TaskStatistics

Service: AWS IoT

Statistics for the checks performed during the audit.

Contents

canceledChecks

The number of checks that did not run because the audit was canceled.

Type: Integer

Required: No

compliantChecks

The number of checks that found compliant resources.

Type: Integer

Required: No

failedChecks

The number of checks

Type: Integer

Required: No

inProgressChecks

The number of checks in progress.

Type: Integer

Required: No

nonCompliantChecks

The number of checks that found non-compliant resources.

Type: Integer

Required: No

totalChecks

The number of checks in this audit.

Type: Integer

Required: No

waitingForDataCollectionChecks

The number of checks waiting for data collection.

Type: Integer

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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
ThingAttribute
Service: AWS IoT

The properties of the thing, including thing name, thing type name, and a list of thing attributes.

Contents

attributes
A list of thing attributes which are name-value pairs.
Type: String to string map
Key Length Constraints: Maximum length of 128.
Key Pattern: [a-zA-Z0-9_.,@/:#-]+
Value Length Constraints: Maximum length of 800.
Value Pattern: [a-zA-Z0-9_.,@/:#-]*
Required: No

thingArn
The thing ARN.
Type: String
Required: No

thingName
The name of the thing.
Type: String
Pattern: [a-zA-Z0-9_:.-]+
Required: No

thingTypeName
The name of the thing type, if the thing has been associated with a type.
Type: String
Pattern: [a-zA-Z0-9_:.-]+
Required: No

version
The version of the thing record in the registry.
Type: Long
Required: No
See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
ThingConnectivity

Service: AWS IoT

The connectivity status of the thing.

Contents

connected

True if the thing is connected to the AWS IoT service; false if it is not connected.

Type: Boolean

Required: No

timestamp

The epoch time (in milliseconds) when the thing last connected or disconnected. If the thing has been disconnected for more than a few weeks, the time value might be missing.

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 Go - Pilot
- 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

**connectivity**

Indicates whether the thing is connected to the AWS IoT service.

Type: `ThingConnectivity` (p. 604) object

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
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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
ThingGroupDocument

Service: AWS IoT

The thing group search index document.

Contents

attributes

The thing group 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

parentGroupName

Parent group names.

Type: Array of strings


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

Required: No

thingGroupDescription

The thing group description.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[^\p{Graph}\x20]*`

Required: No

thingGroupId

The thing group ID.

Type: String


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

Required: No

thingGroupName

The thing 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
ThingGroupIndexingConfiguration
Service: AWS IoT

Thing group indexing configuration.

Contents

thingGroupIndexingMode

Thing group indexing mode.

Type: String

Valid Values: OFF | ON

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 Go - Pilot
- 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. 531) 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 Go - Pilot
- 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. 483) 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
ThingIndexingConfiguration
Service: AWS IoT
The thing indexing configuration. For more information, see Managing Thing Indexing.

Contents

thingConnectivityIndexingMode
Thing connectivity indexing mode. Valid values are:
- STATUS – Your thing index contains connectivity status. To enable thing connectivity indexing, thingIndexMode must not be set to OFF.
- OFF - Thing connectivity status indexing is disabled.

Type: String
Valid Values: OFF | STATUS
Required: No

thingIndexingMode
Thing indexing mode. Valid values are:
- REGISTRY – Your thing index contains registry data only.
- REGISTRY_AND_SHADOW - Your thing index contains registry and shadow data.
- OFF - Thing indexing is disabled.

Type: String
Valid Values: OFF | REGISTRY | REGISTRY_AND_SHADOW
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 Go - Pilot
- 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. 614)` 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. 615)` 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 Go - Pilot
- 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
ThingTypeProperties

Service: AWS IoT

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

Contents

**searchableAttributes**

A list of searchable thing attribute names.

Type: Array of strings

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9-_@/:#-]+

Required: No

**thingTypeDescription**

The description of the thing type.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [\p{Graph}\x20]*

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
TimeoutConfig

Service: AWS IoT

Specifies the amount of time each device has to finish its execution of the job. A timer is started when the job execution status is set to IN_PROGRESS. If the job execution status is not set to another terminal state before the timer expires, it will be automatically set to TIMED_OUT.

Contents

inProgressTimeoutInMinutes

Specifies the amount of time, in minutes, this device has to finish execution of this job. The timeout interval can be anywhere between 1 minute and 7 days (1 to 10080 minutes). The in progress timer can't be updated and will apply to all job executions for the job. Whenever a job execution remains in the IN_PROGRESS status for longer than this interval, the job execution will fail and switch to the terminal TIMED_OUT status.

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 Go - Pilot
- 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. 476)] 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. 476)] 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 Go - Pilot
- 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: `^[\sa-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 Go - Pilot
- 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. 476) 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. 476) 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 Go - Pilot
• 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 Go - Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
ValidationError

Service: AWS IoT

Information about an error found in a behavior specification.

Contents

eerrorMessage

The description of an error found in the behaviors.

Type: String

Length Constraints: Maximum length of 2048.

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 Go – Pilot
- AWS SDK for Java
- AWS SDK for Ruby V2
ViolationEvent

Service: AWS IoT

Information about a Device Defender security profile behavior violation.

Contents

**behavior**

The behavior which was violated.

Type: Behavior (p. 498) object

Required: No

**metricValue**

The value of the metric (the measurement).

Type: MetricValue (p. 556) object

Required: No

**securityProfileName**

The name of the security profile whose behavior was violated.

Type: String


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

Required: No

**thingName**

The name of the thing responsible for the violation event.

Type: String


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

Required: No

**violationEventTime**

The time the violation event occurred.

Type: Timestamp

Required: No

**violationEventType**

The type of violation event.

Type: String

Valid Values: in-alarm | alarm-cleared | alarm-invalidated

Required: No
violationId

The ID of the violation event.

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 Go - Pilot
- 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. 628)
- JobExecutionState (p. 631)
- JobExecutionSummary (p. 632)
JobExecution
Service: AWS IoT Jobs Data Plane

Contains data about a job execution.

Contents

approximateSecondsBeforeTimedOut

The estimated number of seconds that remain before the job execution status will be changed to
TIMED_OUT. The actual job execution timeout can occur up to 60 seconds later than the estimated
duration.

Type: Long

Required: No

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 seconds since the epoch, when the job execution was last updated.

Type: Long

Required: No

queuedAt

The time, in seconds since the epoch, when the job execution was enqueued.

Type: Long

Required: No
startedAt

The time, in seconds 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", "TIMED_OUT", "REJECTED", or "REMOVED".

Type: String

Valid Values: QUEUED | IN_Progress | Succeeded | FAILED | TIMED_OUT | 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 Go - Pilot
- 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", "TIMED_OUT", "REJECTED", or "REMOVED".

Type: String

Valid Values: QUEUED | IN_PROGRESS | SUCCEEDED | FAILED | TIMED_OUT | 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 Go - Pilot
- 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 seconds since the epoch, when the job execution was last updated.
Type: Long
Required: No

**queuedAt**
The time, in seconds since the epoch, when the job execution was enqueued.
Type: Long
Required: No

**startedAt**
The time, in seconds since the epoch, when the job execution started.
Type: Long
Required: No

**versionNumber**
The version of the job execution. Job execution versions are incremented each time AWS IoT Jobs receives an update from a device.
Type: Long
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Go - Pilot
• AWS SDK for Java
• AWS SDK for Ruby V2
Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see Signature Version 4 Signing Process in the Amazon Web Services General Reference.

Action
The action to be performed.
Type: string
Required: Yes

Version
The API version that the request is written for, expressed in the format YYYY-MM-DD.
Type: string
Required: Yes

X-Amz-Algorithm
The hash algorithm that you used to create the request signature.
Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.
Type: string
Valid Values: AWS4-HMAC-SHA256
Required: Conditional

X-Amz-Credential
The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string (“aws4_request”). The value is expressed in the following format: access_key/YYYYMMDD/region/service/aws4_request.
Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is

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