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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.

The service endpoints that expose this API are listed in AWS IoT Core Endpoints and Quotas. You must use the endpoint for the region that has the resources you want to access.

The service name used by AWS Signature Version 4 to sign the request is: execute-api.

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.

AWS IoT Secure Tunneling

AWS IoT Secure Tunneling enables you to create remote connections to devices deployed in the field.
For more information about how AWS IoT Secure Tunneling works, see AWS IoT Secure Tunneling.
Actions

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• RegisterCertificate (p. 437)
• RegisterThing (p. 440)
• RejectCertificateTransfer (p. 443)
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• RemoveThingFromThingGroup (p. 447)
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The following actions are supported by AWS IoT Data Plane:

- DeleteThingShadow (p. 563)
- GetThingShadow (p. 565)
- Publish (p. 567)
- UpdateThingShadow (p. 569)

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

- DescribeJobExecution (p. 572)
- GetPendingJobExecutions (p. 575)
- StartNextPendingJobExecution (p. 578)
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The following actions are supported by AWS IoT Secure Tunneling:

- CloseTunnel (p. 585)
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- AcceptCertificateTransfer (p. 13)
- AddThingToBillingGroup (p. 15)
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- AssociateTargetsWithJob (p. 20)
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- CreateBillingGroup (p. 50)
- CreateCertificateFromCsr (p. 53)
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- DeleteOTAUpdate (p. 154)
- DeletePolicy (p. 156)
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- DeleteV2LoggingLevel (p. 184)
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- DescribeAccountAuditConfiguration (p. 188)
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- DescribeDefaultAuthorizer (p. 211)
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- DescribeDomainConfiguration (p. 216)
- DescribeEndpoint (p. 219)
- DescribeEventConfigurations (p. 221)
- DescribeIndex (p. 223)
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- UpdateTopicRuleDestination (p. 557)
- ValidateSecurityProfileBehaviors (p. 560)
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. 342) 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. 13)

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. 13)

Specifies whether the certificate is active.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

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

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

TransferAlreadyCompletedException

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

HTTP Status Code: 410

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 15)**

The ARN of the billing group.

Type: String

Required: No

**billingGroupName (p. 15)**

The name of the billing group.

Type: String


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

Required: No

**thingArn (p. 15)**

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

Type: String

Required: No

**thingName (p. 15)**

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

Type: String

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

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

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

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

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

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

See Also

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

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

Service: AWS IoT

Adds a thing to a thing group.

Request Syntax

```json
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. 17)

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. 17)

The ARN of the thing to add to a group.

Type: String

Required: No

thingGroupArn (p. 17)

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

Type: String

Required: No

thingGroupName (p. 17)

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

Type: String


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

**thingName (p. 17)**

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 Java
- AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 20)**

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. 20)**

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. 20)**

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. 21)

A short text description of the job.

Type: String
Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

jobArn (p. 21)

An ARN identifying the job.

Type: String

jobId (p. 21)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 23)
The name of the policy to attach.
Pattern: \[\w+=,.@-\]+

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

target (p. 23)
The identity to which the policy is attached.
Type: String
Required: Yes

Response Syntax
HTTP/1.1 200

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

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

LimitExceededException
A limit has been exceeded.
HTTP Status Code: 410

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

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

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

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

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 23) 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. 25)**
  - The policy name.
  - Pattern: `[\w+=,.@-]+`

- **principal (p. 25)**
  - The principal, which can be a certificate ARN (as returned from the CreateCertificate operation) or an Amazon Cognito ID.

**Request Body**

The request does not have a request body.

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

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

**Errors**

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

- **InvalidRequestException**
  - The request is not valid.
  - HTTP Status Code: 400
LimitExceededException
A limit has been exceeded.
HTTP Status Code: 410

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

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

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

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

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

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

Service: AWS IoT

Associates a Device Defender security profile with a thing group or 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. 27)
  - The security profile that is attached.
  - Pattern: `[a-zA-Z0-9:_-]+`
- `securityProfileTargetArn` (p. 27)
  - 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
- `LimitExceedededException`
  - 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**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. 29)**
  
  The principal, which can be a certificate ARN (as returned from the CreateCertificate operation) or an Amazon Cognito ID.

- **thingName (p. 29)**
  
  The name of the thing.
  
  
  Pattern: [a-zA-Z0-9:_-]+

**Request Body**

The request does not have a request body.

**Response Syntax**

HTTP/1.1 200

**Response Elements**

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

**Errors**

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

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

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

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

### See Also

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

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

Service: AWS IoT

Cancels a mitigation action task that is in progress. If the task is not in progress, an InvalidRequestException occurs.

Request Syntax

```
PUT /audit/mitigationactions/tasks/{taskId}/cancel HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**taskId (p. 31)**

The unique identifier for the task that you want to cancel.


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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 33)

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

Service: AWS IoT

Cancels a pending transfer for the specified certificate.

Note Only the transfer source account can use this operation to cancel a transfer. (Transfer destinations can use RejectCertificateTransfer (p. 443) 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. 35)**

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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

**InternalFailureException**

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

**InvalidRequestException**

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

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

TransferAlreadyCompletedException

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

HTTP Status Code: 410

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CancelJob
Service: AWS IoT
Cancels a job.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

force (p. 37)

(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. 37)

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. 37)

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. 37)

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

Type: String

Length Constraints: Maximum length of 128.
AWS IoT API Reference
CancelJob

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. 38)

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

jobArn (p. 38)

The job ARN.

Type: String

jobId (p. 38)

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

Type: String

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

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

Errors

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404
ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

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

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

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

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

URI Request Parameters

The request requires the following URI parameters.

**force (p. 40)**

(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.

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

**jobId (p. 40)**

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. 40)**

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. 40)**

(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. 40)**

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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
Excepted

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

Service: AWS IoT

Confirms a topic rule destination. When you create a rule requiring a destination, AWS IoT sends a confirmation message to the endpoint or base address you specify. The message includes a token which you pass back when calling ConfirmTopicRuleDestination to confirm that you own or have access to the endpoint.

Request Syntax

GET /confirmdestination/<confirmationToken> HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

confirmationToken (p. 45)

The token used to confirm ownership or access to the topic rule confirmation URL.

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

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

Creates an authorizer.

Request Syntax

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

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

URI Request Parameters

The request requires the following URI parameters.

**authorizerName (p. 47)**

The authorizer name.


Pattern: [\w=,@-]+

Request Body

The request accepts the following data in JSON format.

**authorizerFunctionArn (p. 47)**

The ARN of the authorizer's Lambda function.

Type: String

Required: Yes

**signingDisabled (p. 47)**

Specifies whether AWS IoT validates the token signature in an authorization request.

Type: Boolean

Required: No

**status (p. 47)**

The status of the create authorizer request.

Type: String

Valid Values: ACTIVE | INACTIVE
Required: No

**tokenKeyName (p. 47)**

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

Type: String


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

Required: No

**tokenSigningPublicKeys (p. 47)**

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: 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. 48)**

The authorizer ARN.

Type: String

**authorizerName (p. 48)**

The authorizer's name.

Type: String


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

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

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

LimitExceededException
A limit has been exceeded.
HTTP Status Code: 410

ResourceAlreadyExistsException
The resource already exists.
HTTP Status Code: 409

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

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

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

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 50)

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. 50)

The properties of the billing group.
Type: BillingGroupProperties (p. 645) object
Required: No
tags (p. 50)

Metadata which can be used to manage the billing group.
Type: Array of Tag (p. 773) objects
Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/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.

billingGroupArn (p. 50)
  The ARN of the billing group.
  Type: String

billingGroupId (p. 50)
  The ID of the billing group.
  Type: String
  Pattern: [a-zA-Z0-9\-]+

billingGroupName (p. 50)
  The name you gave to the billing group.
  Type: String
  Pattern: [a-zA-Z0-9:\-]+

Errors

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

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

ResourceAlreadyExistsException
  The resource already exists.
  HTTP Status Code: 409

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

See Also

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

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

```bash
> 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:

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

**Request Syntax**

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

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

**URI Request Parameters**

The request requires the following URI parameters.

**setAsActive (p. 53)**

Specifies whether the certificate is active.
Request Body

The request accepts the following data in JSON format.

certificateSigningRequest (p. 53)

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. 54)

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

Type: String

certificateId (p. 54)

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

Type: String

Length Constraints: Fixed length of 64.

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

certificatePem (p. 54)

The certificate data, in PEM format.

Type: String


Errors

InternalFailureException

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

The request is not valid.

HTTP Status Code: 400
**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429
**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

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

Service: AWS IoT

Create a dimension that you can use to limit the scope of a metric used in a security profile for AWS IoT Device Defender. For example, using a `TOPIC_FILTER` dimension, you can narrow down the scope of the metric only to MQTT topics whose name match the pattern specified in the dimension.

**Request Syntax**

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

{
    "clientRequestToken": "string",
    "stringValues": [ "string" ],
    "tags": [ { "Key": "string", "Value": "string" }
            ],
    "type": "string"
}
```

**URI Request Parameters**

The request requires the following URI parameters.

**name (p. 56)**

A unique identifier for the dimension. Choose something that describes the type and value to make it easy to remember what it does.


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

**Request Body**

The request accepts the following data in JSON format.

**clientRequestToken (p. 56)**

Each dimension must have a unique client request token. If you try to create a new dimension with the same token as a dimension that already exists, an exception occurs. If you omit this value, AWS SDKs will automatically generate a unique client request.

Type: String

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

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

Required: Yes

**stringValues (p. 56)**

Specifies the value or list of values for the dimension. For `TOPIC_FILTER` dimensions, this is a pattern used to match the MQTT topic (for example, "admin/#").
CreateDimension

Type: Array of strings
Array Members: Minimum number of 1 item. Maximum number of 100 items.
Length Constraints: Minimum length of 1. Maximum length of 256.
Required: Yes
tags (p. 56)
Metadata that can be used to manage the dimension.
Type: Array of Tag (p. 773) objects
Required: No
type (p. 56)
Specifies the type of dimension. Supported types: TOPIC_FILTER.
Type: String
Valid Values: TOPIC_FILTER
Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "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.

arn (p. 57)
The ARN (Amazon resource name) of the created dimension.
Type: String
name (p. 57)
A unique identifier for the dimension.
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
LimitExceeded Exception
A limit has been exceeded.

HTTP Status Code: 410
ResourceAlreadyExistsException
The resource already exists.

HTTP Status Code: 409
ThrottlingException
The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

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

Service: AWS IoT

Creates a domain configuration.

**Note**
The domain configuration feature is in public preview and is subject to change.

**Request Syntax**

```json
POST /domainConfigurations/d|omainConfigurationName HTTP/1.1
Content-type: application/json

{
    "authorizerConfig": {
        "allowAuthorizerOverride": boolean,
        "defaultAuthorizerName": "string"
    },
    "domainName": "string",
    "serverCertificateArns": [ "string" ],
    "serviceType": "string",
    "validationCertificateArn": "string"
}
```

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

**domainConfigurationName (p. 59)**
The name of the domain configuration. This value must be unique to a region.


Pattern: [\w.-]+

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

**authorizerConfig (p. 59)**
An object that specifies the authorization service for a domain.

Type: `AuthorizerConfig (p. 634)` object

Required: No

**domainName (p. 59)**
The name of the domain.

Type: String


Required: No
**serverCertificateArns (p. 59)**

The ARNs of the certificates that AWS IoT passes to the device during the TLS handshake. Currently you can specify only one certificate ARN. This value is not required for AWS-managed domains.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 1 item.

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

Pattern: `arn:aws:acm:[a-z]{2}-(gov-)?[a-z]{4,9}-\d{1}:\d{12}:certificate/?[a-zA-Z0-9/-]+`

Required: No

**serviceType (p. 59)**

The type of service delivered by the endpoint.

Type: String

Valid Values: DATA | CREDENTIAL_PROVIDER | JOBS

Required: No

**validationCertificateArn (p. 59)**

The certificate used to validate the server certificate and prove domain name ownership. This certificate must be signed by a public certificate authority. This value is not required for AWS-managed domains.

Type: String

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

Pattern: `arn:aws:acm:[a-z]{2}-(gov-)?[a-z]{4,9}-\d{1}:\d{12}:certificate/?[a-zA-Z0-9/-]+`

Required: No

**Response Syntax**

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

{
   "domainConfigurationArn": "string",
   "domainConfigurationName": "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.

**domainConfigurationArn (p. 60)**

The ARN of the domain configuration.
Type: String

**domainConfigurationName (p. 60)**

The name of the domain configuration.

Type: String


Pattern: [\w.-]+

---

**Errors**

**CertificateValidationException**

The certificate is invalid.

HTTP Status Code: 400

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

**ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

---

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 63)

The dynamic thing group name to create.


Pattern: [\w-]+

Request Body

The request accepts the following data in JSON format.

indexName (p. 63)

The dynamic thing group index name.

Note
Currently one index is supported: "AWS_Things".

Type: String


Pattern: [\w-]+
Required: No

**queryString (p. 63)**

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. 63)**

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. 63)**

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

Type: Array of [Tag (p. 773)] objects

Required: No

**thingGroupProperties (p. 63)**

The dynamic thing group properties.

Type: [ThingGroupProperties (p. 786)] 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.
**CreateDynamicThingGroup**

- **indexName (p. 64)**
  - The dynamic thing group index name.
  - Type: String
  - Pattern: `[a-zA-Z0-9:_-]+`

- **queryString (p. 64)**
  - The dynamic thing group search query string.
  - Type: String
  - Length Constraints: Minimum length of 1.

- **queryVersion (p. 64)**
  - The dynamic thing group query version.
  - Type: String

- **thingGroupArn (p. 64)**
  - The dynamic thing group ARN.
  - Type: String

- **thingGroupId (p. 64)**
  - The dynamic thing group ID.
  - Type: String
  - Pattern: `[a-zA-Z0-9\-\_]+`

- **thingGroupName (p. 64)**
  - 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateJob

Service: AWS IoT

Creates a job.

Request Syntax

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. 67)**

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

Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [a-zA-Z0-9_-]+

**Request Body**

The request accepts the following data in JSON format.

**abortConfig (p. 67)**

Allows you to create criteria to abort a job.

Type: `AbortConfig (p. 608)` object

Required: No

**description (p. 67)**

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

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

Required: No

**document (p. 67)**

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. 67)**

An S3 link to the job document.

Type: String


Required: No

**jobExecutionsRolloutConfig (p. 67)**

Allows you to create a staged rollout of the job.

Type: `JobExecutionsRolloutConfig (p. 696)` object

Required: No

**presignedUrlConfig (p. 67)**

Configuration information for pre-signed S3 URLs.
CreateJob

Type: PresignedUrlConfig (p. 732) object

Required: No
gtags (p. 67)

Metadata which can be used to manage the job.

Type: Array of Tag (p. 773) objects

Required: No
gtargets (p. 67)

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. 67)

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. 67)

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. 792) 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. 69)**

The job description.

Type: String

Length Constraints: Maximum length of 2028.

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

**jobArn (p. 69)**

The job ARN.

Type: String

**jobId (p. 69)**

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateKeysAndCertificate

Service: AWS IoT

Creates a 2048-bit RSA key pair and issues an X.509 certificate using the issued public key. You can also call CreateKeysAndCertificate over MQTT from a device, for more information, see Provisioning MQTT API.

**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. 72)**
  
  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. 72)**
  
  The ARN of the certificate.

  Type: String

- **certificateId (p. 72)**
  
  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. 72)

The certificate data, in PEM format.

Type: String


keyPair (p. 72)

The generated key pair.

Type: KeyPair (p. 706) object

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

Defines an action that can be applied to audit findings by using StartAuditMitigationActionsTask. Each mitigation action can apply only one type of change.

Request Syntax

```
POST /mitigationactions/actions/{actionName} HTTP/1.1
Content-type: application/json

{
    "actionParams": {
        "addThingsToThingGroupParams": {
            "overrideDynamicGroups": boolean,
            "thingGroupNames": [ "string" ]
        },
        "enableIoTLoggingParams": {
            "logLevel": "string",
            "roleArnForLogging": "string"
        },
        "publishFindingToSnsParams": {
            "topicArn": "string"
        },
        "replaceDefaultPolicyVersionParams": {
            "templateName": "string"
        },
        "updateCACertificateParams": {
            "action": "string"
        },
        "updateDeviceCertificateParams": {
            "action": "string"
        }
    },
    "roleArn": "string",
    "tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ]
}
```

URI Request Parameters

The request requires the following URI parameters.

**actionName (p. 75)**

A friendly name for the action. Choose a friendly name that accurately describes the action (for example, EnableLoggingAction).

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9-_]+
actionParams (p. 75)

Defines the type of action and the parameters for that action.

Type: MitigationActionParams (p. 717) object

Required: Yes

roleArn (p. 75)

The ARN of the IAM role that is used to apply the mitigation action.

Type: String


Required: Yes

tags (p. 75)

Metadata that can be used to manage the mitigation action.

Type: Array of Tag (p. 773) objects

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

```json
{
  "actionArn": "string",
  "actionId": "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.

actionArn (p. 76)

The ARN for the new mitigation action.

Type: String

actionId (p. 76)

A unique identifier for the new mitigation action.

Type: String

Errors

InternalFailureException

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

HTTP Status Code: 400
LimitExceededException
A limit has been exceeded.

HTTP Status Code: 410
ResourceAlreadyExistsException
The resource already exists.

HTTP Status Code: 409
ThrottlingException
The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

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

**Service:** AWS IoT

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

#### Request Syntax

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

{
  "additionalParameters": {
    "string": "string"
  },
  "awsJobExecutionsRolloutConfig": {
    "maximumPerMinute": number
  },
  "awsJobPresignedUrlConfig": {
    "expiresInSec": number
  },
  "description": "string",
  "files": [
    {
      "attributes": {
        "string": "string"
      },
      "codeSigning": {
        "awsSignerJobId": "string",
        "customCodeSigning": {
          "certificateChain": {
            "certificateName": "string",
            "inlineDocument": "string"
          },
          "hashAlgorithm": "string",
          "signature": {
            "inlineDocument": "blob"
          },
          "signatureAlgorithm": "string"
        },
        "StartPositionParameter": {
          "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"
        }
      }
    }
  ]
}
```
CreateOTAUpdate

```json
{
    "otaUpdateId": "string",
    "description": "string",
    "fileName": "string",
    "fileVersion": "string",
    "protocols": [ "string" ],
    "roleArn": "string",
    "tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ],
    "targets": [ "string" ],
    "targetSelection": "string"
}
```

### URI Request Parameters

The request requires the following URI parameters.

**otaUpdateId (p. 78)**

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. 78)**

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

- Type: String to string map
- Required: No

**awsJobExecutionsRolloutConfig (p. 78)**

Configuration for the rollout of OTA updates.

- Type: `AwsJobExecutionsRolloutConfig (p. 639)` object
- Required: No

**awsJobPresignedUrlConfig (p. 78)**

Configuration information for pre-signed URLs.

- Type: `AwsJobPresignedUrlConfig (p. 640)` object
- Required: No

**description (p. 78)**

The description of the OTA update.

- Type: String
files (p. 78)

The files to be streamed by the OTA update.

Type: Array of OTAUpdateFile (p. 721) objects

Array Members: Minimum number of 1 item. Maximum number of 50 items.

Required: Yes

protocols (p. 78)

The protocol used to transfer the OTA update image. Valid values are [HTTP], [MQTT], [HTTP, MQTT]. When both HTTP and MQTT are specified, the target device can choose the protocol.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 2 items.

Valid Values: MQTT | HTTP

Required: No

roleArn (p. 78)

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

Type: String


Required: Yes

tags (p. 78)

Metadata which can be used to manage updates.

Type: Array of Tag (p. 773) objects

Required: No

targets (p. 78)

The targeted devices to receive OTA updates.

Type: Array of strings

Array Members: Minimum number of 1 item.

Required: Yes

targetSelection (p. 78)

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. 81)

The AWS IoT job ARN associated with the OTA update.

Type: String

awsIotJobId (p. 81)

The AWS IoT job ID associated with the OTA update.

Type: String

otaUpdateArn (p. 81)

The OTA update ARN.

Type: String

otaUpdateId (p. 81)

The OTA update ID.

Type: String


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

otaUpdateStatus (p. 81)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 84)**

The policy name.

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

Request Body

The request accepts the following data in JSON format.

**policyDocument (p. 84)**

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. 84)**
- The policy ARN.
- Type: String

**policyDocument (p. 84)**
- The JSON document that describes the policy.
- Type: String

**policyName (p. 84)**
- The policy name.
- Type: String
- Pattern: \[\w+=,.@-]+

**policyVersionId (p. 84)**
- The policy version ID.
- Type: String
- Pattern: [0-9]+

### Errors

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

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

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

**ResourceAlreadyExistsException**
- The resource already exists.
- HTTP Status Code: 409

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

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

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 158) to delete an existing version before you create a new one.

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

Request Syntax

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

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

URI Request Parameters

The request requires the following URI parameters.

**policyName (p. 87)**

The policy name.


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

**setAsDefault (p. 87)**

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. 87)**

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. 87)**

Specifies whether the policy version is the default.

*Type: Boolean*

**policyArn (p. 87)**

The policy ARN.

*Type: String*

**policyDocument (p. 87)**

The JSON document that describes the policy.

*Type: String*

**policyVersionId (p. 87)**

The policy version ID.

*Type: String*

*Pattern: [0-9]+*

### Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**MalformedPolicyException**

The policy documentation is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404
ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

VersionsLimitExceededeException

The number of policy versions exceeds the limit.

HTTP Status Code: 409

See Also

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

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

Service: AWS IoT

Creates a provisioning claim.

Request Syntax

```
POST /provisioning-templates/templateName/provisioning-claim HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**TemplateName (p. 90)**

The name of the provisioning template to use.


Pattern: `^[0-9A-Za-z_\-]+$`

Request Body

The request does not have a request body.

Response Syntax

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

{
  "certificateId": "string",
  "certificatePem": "string",
  "expiration": number,
  "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.

**certificateId (p. 90)**

The ID of the certificate.

Type: String

Length Constraints: Fixed length of 64.

Pattern: `(0x)?[a-fA-F0-9]+`
certificatePem (p. 90)

The provisioning claim certificate.
Type: String

expiration (p. 90)

The provisioning claim expiration time.
Type: Timestamp

keyPair (p. 90)

The provisioning claim key pair.
Type: KeyPair (p. 706) object

Errors

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

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

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

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

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

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

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

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

Creates a fleet provisioning template.

Request Syntax

```
POST /provisioning-templates HTTP/1.1
Content-type: application/json

{
    "description": "string",
    "enabled": boolean,
    "provisioningRoleArn": "string",
    "tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ],
    "templateBody": "string",
    "templateName": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

description (p. 93)

The description of the fleet provisioning template.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

Pattern: [^\p{C}]*

Required: No

description (p. 93)

enabled (p. 93)

True to enable the fleet provisioning template, otherwise false.

Type: Boolean

Required: No

provisioningRoleArn (p. 93)

The role ARN for the role associated with the fleet provisioning template. This IoT role grants permission to provision a device.

Type: String

Required: Yes

tags (p. 93)

Metadata which can be used to manage the fleet provisioning template.

**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..."

Type: Array of Tag (p. 773) objects

Required: No

templateBody (p. 93)

The JSON formatted contents of the fleet provisioning template.

Type: String

Required: Yes
templateName (p. 93)

The name of the fleet provisioning template.

Type: String


Pattern: ^\[0-9A-Za-z_\-]+$  

Required: Yes

Response Syntax

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

{      
  "defaultVersionId": number,  
  "templateArn": "string",  
  "templateName": "string"  
}
```

Response Elements

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

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

defaultVersionId (p. 94)

The default version of the fleet provisioning template.

Type: Integer

templateArn (p. 94)

The ARN that identifies the provisioning template.

Type: String
templateName (p. 94)

The name of the fleet provisioning template.

Type: String


Pattern: ^[0-9A-Za-z_-]+$ 

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

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateProvisioningTemplateVersion
Service: AWS IoT
Creates a new version of a fleet provisioning template.

Request Syntax

POST /provisioning-templates/TemplateName/versions?setAsDefault=setAsDefault HTTP/1.1
Content-type: application/json

{
  "templateBody": "string"
}

URI Request Parameters

The request requires the following URI parameters.

setAsDefault (p. 97)
Sets a fleet provision template version as the default version.

templateName (p. 97)
The name of the fleet provisioning template.

Pattern: ^[0-9A-Za-z_\-]+$

Request Body

The request accepts the following data in JSON format.

templateBody (p. 97)
The JSON formatted contents of the fleet provisioning template.

Type: String
Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "isDefaultVersion": boolean,
  "templateArn": "string",
  "templateName": "string",
  "versionId": 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.

**isDefaultVersion (p. 97)**

True if the fleet provisioning template version is the default version, otherwise false.

Type: Boolean

**templateArn (p. 97)**

The ARN that identifies the provisioning template.

Type: String

**templateName (p. 97)**

The name of the fleet provisioning template.

Type: String


Pattern: ^[0-9A-Za-z_\-]+$

**versionId (p. 97)**

The version of the fleet provisioning template.

Type: Integer

**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

**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

**VersionsLimitExceededException**

The number of policy versions exceeds the limit.

HTTP Status Code: 409

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 100)

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. 100)

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

Type: Integer


Required: No

roleArn (p. 100)

The role ARN.

Type: String


Required: Yes

Response Syntax

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

{
   "roleAlias": "string",
   "roleAliasArn": "string"
}

Response Elements

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

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

**roleAlias (p. 100)**

The role alias.

Type: String


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

**roleAliasArn (p. 100)**

The role alias ARN.

Type: String

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

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

**ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.
HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

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

Service: AWS IoT

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

Request Syntax

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. 103)

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. 103)

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. 103)

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
CreateScheduledAudit

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

Required: No

`frequency (p. 103)`

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

Type: String

Valid Values: DAILY | WEEKLY | BIWEEKLY | MONTHLY

Required: Yes

`tags (p. 103)`

Metadata that can be used to manage the scheduled audit.

Type: Array of Tag (p. 773) objects

Required: No

`targetCheckNames (p. 103)`

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 use UpdateAccountAuditConfiguration to select which checks are enabled.)

Type: Array of strings

Required: Yes

Response Syntax

```plaintext
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. 104)`

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
ResourceAlreadyExistsException
The resource already exists.

HTTP Status Code: 409
ThrottlingException
The rate exceeds the limit.

HTTP Status Code: 429

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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" ],
   "additionalMetricsToRetainV2": [ 
   { "metric": "string",
      "metricDimension": {
      "dimensionName": "string",
      "operator": "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",
   "metricDimension": { "dimensionName": "string",
      "operator": "string"
   },
   "name": "string"
   }
   ],
   "securityProfileDescription": "string",
   "tags": [ 
   { "Key": "string",
      "Value": "string"
   }
   ]
}
URI Request Parameters

The request requires the following URI parameters.

securityProfileName (p. 106)

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. 106)

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.

Note: This API field is deprecated. Please use CreateSecurityProfile:additionalMetricsToRetainV2 (p. 107) instead.

Type: Array of strings

Required: No

additionalMetricsToRetainV2 (p. 106)

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 MetricToRetain (p. 713) objects

Required: No

alertTargets (p. 106)

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. 616) object map

Valid Keys: SNS

Required: No

behaviors (p. 106)

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

Type: Array of Behavior (p. 641) objects

Array Members: Maximum number of 100 items.

Required: No

securityProfileDescription (p. 106)

A description of the security profile.

Type: String
Length Constraints: Maximum length of 1000.

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

Required: No

tags (p. 106)

Metadata that can be used to manage the security profile.

Type: Array of Tag (p. 773) objects

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/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. 108)

The ARN of the security profile.

Type: String

securityProfileName (p. 108)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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.

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. 110)**

The stream ID.


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

Request Body

The request accepts the following data in JSON format.

**description (p. 110)**

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

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

Required: No

files (p. 110)

The files to stream.
Type: Array of StreamFile (p. 769) objects
Array Members: Minimum number of 1 item. Maximum number of 50 items.
Required: Yes

roleArn (p. 110)

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

tags (p. 110)

Metadata which can be used to manage streams.
Type: Array of Tag (p. 773) 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. 111)

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

streamArn (p. 111)

The stream ARN.
Type: String
streamId (p. 111)

The stream ID.

Type: String


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

streamVersion (p. 111)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 114)**

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. 114)**

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

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

Type: AttributePayload (p. 621) object

Required: No

**billingGroupName (p. 114)**

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

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

**thingTypeName (p. 114)**

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. 115)**

The ARN of the new thing.  
Type: String

**thingId (p. 115)**

The thing ID.  
Type: String

**thingName (p. 115)**

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

**Errors**

**InternalFailureException**

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

The request is not valid.

HTTP Status Code: 400
**ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409
**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404
**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429
**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

```plaintext
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. 117)**

The thing group name to create.


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

**Request Body**

The request accepts the following data in JSON format.

**parentGroupName (p. 117)**

The name of the parent thing group.

Type: String


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

Required: No

tags (p. 117)

Metadata which can be used to manage the thing group.

Type: Array of Tag (p. 773) objects

Required: No

thingGroupProperties (p. 117)

The thing group properties.

Type: ThingGroupProperties (p. 786) object

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

```
{
  "thingGroupArn": "string",
  "thingGroupId": "string",
  "thingGroupName": "string"
}
```

Response Elements

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

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

thingGroupArn (p. 118)

The thing group ARN.

Type: String

thingGroupId (p. 118)

The thing group ID.

Type: String


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

thingGroupName (p. 118)

The thing group name.

Type: String


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

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 120)**

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

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

**tags (p. 120)**

Metadata which can be used to manage the thing type.
Type: Array of Tag (p. 773) objects
Required: No

**thingTypeProperties (p. 120)**

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. 791) object
Required: No

Response Syntax

HTTP/1.1 200
CreateThingType

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. 120)**

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

Type: String

**thingTypeId (p. 120)**

The thing type ID.

Type: String

**thingTypeName (p. 120)**

The name of the thing type.

Type: String


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

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceAlreadyExistsException**

The resource already exists.

HTTP Status Code: 409

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.
HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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"
                },
                "cloudwatchLogs": {
                    "logGroupName": "string",
                    "roleArn": "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"
                }
            }
        ]
    }
}
CreateTopicRule

`,
"http": {
  "auth": {
    "sigv4": {
      "roleArn": "string",
      "serviceName": "string",
      "signingRegion": "string"
    }
  },
  "confirmationUrl": "string",
  "headers": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "url": "string"
},
"iotAnalytics": {
  "channelArn": "string",
  "channelName": "string",
  "roleArn": "string"
},
"iotEvents": {
  "inputName": "string",
  "messageId": "string",
  "roleArn": "string"
},
"iotSiteWise": {
  "putAssetPropertyValueEntries": [
    {
      "assetId": "string",
      "entryId": "string",
      "propertyAlias": "string",
      "propertyId": "string",
      "propertyValues": [
        {
          "quality": "string",
          "timestamp": {
            "offsetInNanos": "string",
            "timeInSeconds": "string"
          },
          "value": {
            "booleanValue": "string",
            "doubleValue": "string",
            "integerValue": "string",
            "stringValue": "string"
          }
        }
      ]
    }
  ],
  "roleArn": "string"
},
"kinesis": {
  "partitionKey": "string",
  "roleArn": "string",
  "streamName": "string"
},
"lambda": {
  "functionArn": "string"
},
"republish": {
  "qos": number,
  "roleArn": "string",
  "topic": "string"
### CreateTopicRule

The `CreateTopicRule` operation allows you to create a new topic rule, which is a policy that describes how the IoT Core should respond to events published to an Amazon S3, Amazon SNS, Amazon SQS, or Amazon SNS or Amazon SQS topic. The operation requires the following parameters:

- **`name`**: A string that identifies the rule.
- **`awsIotSqlVersion`**: A string that identifies the version of AWS IoT SQL that this rule uses.
- **`description`**: A string that describes the rule.
- **`errorAction`**: An object that specifies the error action to be taken when a rule is triggered.

#### AWS IoT SQL Version

This parameter specifies the version of AWS IoT SQL that is used by the rule. The SQL version is a string value.

#### s3

An object that specifies the S3 data store that this rule uses. It includes the following properties:

- **bucketName**: A string that identifies the S3 bucket.
- **cannedAcl**: A string that specifies the canned ACL for the S3 object.
- **key**: A string that specifies the key for the S3 object.
- **roleArn**: A string that specifies the ARN of the IAM role to use for accessing the S3 bucket.

#### salesforce

An object that specifies the Salesforce data store that this rule uses. It includes the following properties:

- **token**: A string that specifies the Salesforce access token.
- **url**: A string that specifies the Salesforce API URL.

#### sns

An object that specifies the SNS data store that this rule uses. It includes the following properties:

- **messageFormat**: A string that specifies the message format for the SNS message.
- **roleArn**: A string that specifies the ARN of the IAM role to use for accessing the SNS topic.
- **targetArn**: A string that specifies the ARN of the target SNS topic.

#### sqs

An object that specifies the SQS data store that this rule uses. It includes the following properties:

- **queueUrl**: A string that specifies the SQS queue URL.
- **roleArn**: A string that specifies the ARN of the IAM role to use for accessing the SQS queue.
- **useBase64**: A boolean value that specifies whether to use base64 encoding for the message.

#### stepFunctions

An object that specifies the Step Functions state machine that this rule uses. It includes the following properties:

- **executionNamePrefix**: A string that specifies the prefix for the Step Functions execution name.
- **roleArn**: A string that specifies the ARN of the IAM role to use for invoking the state machine.
- **stateMachineName**: A string that specifies the name of the Step Functions state machine.

---

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>name</code></td>
<td>string</td>
<td>Unique identifier for the rule</td>
</tr>
<tr>
<td><code>awsIotSqlVersion</code></td>
<td>string</td>
<td>Version of AWS IoT SQL used by the rule</td>
</tr>
<tr>
<td><code>description</code></td>
<td>string</td>
<td>Description of the rule</td>
</tr>
<tr>
<td><code>errorAction</code></td>
<td>object</td>
<td>Error action for the rule</td>
</tr>
<tr>
<td><code>s3</code></td>
<td>object</td>
<td>Amazon S3 data store for the rule</td>
</tr>
<tr>
<td><code>bucketName</code></td>
<td>string</td>
<td>S3 bucket name</td>
</tr>
<tr>
<td><code>cannedAcl</code></td>
<td>string</td>
<td>S3 object ACL</td>
</tr>
<tr>
<td><code>key</code></td>
<td>string</td>
<td>S3 object key</td>
</tr>
<tr>
<td><code>roleArn</code></td>
<td>string</td>
<td>ARN of the IAM role for S3 access</td>
</tr>
<tr>
<td><code>salesforce</code></td>
<td>object</td>
<td>Salesforce data store for the rule</td>
</tr>
<tr>
<td><code>token</code></td>
<td>string</td>
<td>Salesforce access token</td>
</tr>
<tr>
<td><code>url</code></td>
<td>string</td>
<td>Salesforce API URL</td>
</tr>
<tr>
<td><code>sns</code></td>
<td>object</td>
<td>Amazon SNS data store for the rule</td>
</tr>
<tr>
<td><code>messageFormat</code></td>
<td>string</td>
<td>SNS message format</td>
</tr>
<tr>
<td><code>roleArn</code></td>
<td>string</td>
<td>ARN of the IAM role for SNS access</td>
</tr>
<tr>
<td><code>targetArn</code></td>
<td>string</td>
<td>Target SNS topic ARN</td>
</tr>
<tr>
<td><code>sqs</code></td>
<td>object</td>
<td>Amazon SQS data store for the rule</td>
</tr>
<tr>
<td><code>queueUrl</code></td>
<td>string</td>
<td>SQS queue URL</td>
</tr>
<tr>
<td><code>roleArn</code></td>
<td>string</td>
<td>ARN of the IAM role for SQS access</td>
</tr>
<tr>
<td><code>useBase64</code></td>
<td>boolean</td>
<td>Use base64 encoding for message</td>
</tr>
<tr>
<td><code>stepFunctions</code></td>
<td>object</td>
<td>Step Functions state machine for the rule</td>
</tr>
<tr>
<td><code>executionNamePrefix</code></td>
<td>string</td>
<td>Prefix for execution name</td>
</tr>
<tr>
<td><code>roleArn</code></td>
<td>string</td>
<td>ARN of the IAM role for Step Functions access</td>
</tr>
<tr>
<td><code>stateMachineName</code></td>
<td>string</td>
<td>State machine name</td>
</tr>
</tbody>
</table>

---

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CreateTopicRule

```
"elasticsearch": {
  "endpoint": "string",
  "id": "string",
  "index": "string",
  "roleArn": "string",
  "type": "string"
},
"firehose": {
  "deliveryStreamName": "string",
  "roleArn": "string",
  "separator": "string"
},
"http": {
  "auth": {
    "sigv4": {
      "roleArn": "string",
      "serviceName": "string",
      "signingRegion": "string"
    }
  },
  "confirmationUrl": "string",
  "headers": [
    {"key": "string",
     "value": "string"
    }
  ],
  "url": "string"
},
"iotAnalytics": {
  "channelArn": "string",
  "channelName": "string",
  "roleArn": "string"
},
"iotEvents": {
  "inputName": "string",
  "messageId": "string",
  "roleArn": "string"
},
"iotSiteWise": {
  "putAssetPropertyValueEntries": [
    {
      "assetId": "string",
      "entryId": "string",
      "propertyAlias": "string",
      "propertyId": "string",
      "propertyValues": [
        {
          "quality": "string",
          "timestamp": {
            "offsetInNanos": "string",
            "timeInSeconds": "string"
          },
          "value": {
            "booleanValue": "string",
            "doubleValue": "string",
            "integerValue": "string",
            "stringValue": "string"
          }
        }
      ]
    }
  ],
  "roleArn": "string"
},
```

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"kinesis": {  
  "partitionKey": "string",  
  "roleArn": "string",  
  "streamName": "string" 
},
"lambda": {  
  "functionArn": "string" 
},
"republish": {  
  "qos": number,  
  "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. 123)**

The name of the rule.


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

**tags (p. 123)**

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. 123)**

The rule payload.

Type: TopicRulePayload (p. 802) 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateTopicRuleDestination
Service: AWS IoT

Creates a topic rule destination. The destination must be confirmed prior to use.

Request Syntax

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

{  
  "destinationConfiguration": {
    "httpUrlConfiguration": {
      "confirmationUrl": "string"
    }
  }
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

destinationConfiguration (p. 130)

The topic rule destination configuration.

Type: TopicRuleDestinationConfiguration (p. 798) object

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "topicRuleDestination": {
    "arn": "string",
    "httpUrlProperties": {
      "confirmationUrl": "string"
    },
    "status": "string",
    "statusReason": "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.
**topicRuleDestination (p. 130)**

The topic rule destination.

Type: `TopicRuleDestination (p. 796)` object

**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

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 132)

   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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 134)**

The name of the authorizer to delete.


Pattern: [\w=,@-]+

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

**DeleteConflictException**

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

HTTP Status Code: 409

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

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

_ServiceUnavailableException_

The service is temporarily unavailable.

HTTP Status Code: 503

_ThrottlingException_

The rate exceeds the limit.

HTTP Status Code: 429

_UnauthorizedException_

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 136)

The name of the billing group.


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

expectedVersion (p. 136)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteCA Certificate
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.

caCertificateId (p. 138)

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

Length Constraints: Fixed length of 64.

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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

CertificateStateException

The certificate operation is not allowed.

HTTP Status Code: 406

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

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

The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429
**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 264) API to detach all policies. Next, use the UpdateCertificate (p. 508) 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. 140)

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. 140)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteDimension
Service: AWS IoT
Removes the specified dimension from your AWS account.

Request Syntax
DELETE /dimensions/name HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.

name (p. 142)
The unique identifier for the dimension that 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

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

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
DeleteDomainConfiguration
Service: AWS IoT

Deletes the specified domain configuration.

**Note**
The domain configuration feature is in public preview and is subject to change.

Request Syntax

```
DELETE /domainConfigurations/domainConfigurationName HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

domainConfigurationName **(p. 144)**

The name of the domain configuration to be deleted.


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

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404
ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 146)**
  - The expected version of the dynamic thing group to delete.

- **thingGroupName (p. 146)**
  - 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**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**

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

**URI Request Parameters**

The request requires the following URI parameters.

- **force (p. 148)**
  - (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. 148)**
  - 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteJobExecution

Service: AWS IoT

Deletes a job execution.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

**executionNumber (p. 150)**

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. 150)**

(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. 150)**

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. 150)**

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


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

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```
Response Elements

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

Errors

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

InvalidStateTransitionException

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

HTTP Status Code: 409

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteMitigationAction
Service: AWS IoT
Deletes a defined mitigation action from your AWS account.

Request Syntax

```
DELETE /mitigationactions/actions/actionName HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

`actionName` (p. 152)

The name of the mitigation action that you want to delete.
Length Constraints: Maximum length of 128.
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

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteOTAUpdate
Service: AWS IoT
Delete an OTA update.

Request Syntax

DELETE /otaUpdates/otaUpdateId?
deleteStream=deleteStream&forceDeleteAWSJob=forceDeleteAWSJob HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.

deleteStream (p. 154)
Specifies if the stream associated with an OTA update should be deleted when the OTA update is deleted.

forceDeleteAWSJob (p. 154)
Specifies if the AWS Job associated with the OTA update should be deleted with the OTA update is deleted.

otaUpdateId (p. 154)
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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 156)

The name of the policy to delete.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

DeleteConflictException

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

HTTP Status Code: 409

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500
InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 156). 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. 158)
The name of the policy.
Pattern: [\w+=,.@-]+

policyVersionId (p. 158)
The policy version ID.
Pattern: [0-9]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

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

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

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

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

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

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

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

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

Service: AWS IoT

Deletes a fleet provisioning template.

Request Syntax

```
DELETE /provisioning-templates/templateName HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

`TemplateName (p. 160)`

The name of the fleet provision template to delete.


Pattern: `^[0-9A-Za-z_\-]+$`

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

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteProvisioningTemplateVersion
Service: AWS IoT
Deletes a fleet provisioning template version.

Request Syntax

DELETE /provisioning-templates/{templateName}/versions/{versionId} HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

**templateName (p. 162)**

The name of the fleet provisioning template version to delete.

- Pattern: ^[0-9A-Za-z_\-]+$  

**versionId (p. 162)**

The fleet provisioning template version ID to delete.

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

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

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

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteRegistrationCode
Service: AWS IoT
Deletes a CA certificate registration code.

Request Syntax
DELETE /registrationcode HTTP/1.1

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

Request Body
The request does not have a request body.

Response Syntax
HTTP/1.1 200

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

Errors

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

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

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

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

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

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 166)**

- The role alias to delete.
- Pattern: `\[\w=,@-]+`

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

**DeleteConflictException**

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

**InternalFailureException**

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

**InvalidRequestException**

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

**ResourceNotFoundException**

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

The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429
**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 168)
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.
See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 170)**

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 from the actual version, a VersionConflictException is thrown.

**securityProfileName (p. 170)**

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 172)
The stream ID.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

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

HTTP Status Code: 409

InternalFailureException
An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException
The request is not valid.

HTTP Status Code: 400

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

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 174)**

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. 174)**

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.

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 176)

The expected version of the thing group to delete.

**thingGroupName** (p. 176)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**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. 186)`, then remove any associated things by calling `UpdateThing (p. 548)` to change the thing type on any associated thing, and finally use `DeleteThingType (p. 178)` 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. 178)**

The name of the thing type.

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

**Request Body**

The request does not have a request body.

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

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

**Errors**

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

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

- **ResourceNotFoundException**
  - The specified resource does not exist.
  - HTTP Status Code: 404
ServiceUnavailableException
The service is temporarily unavailable.
HTTP Status Code: 503

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

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

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 180)**

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteTopicRuleDestination
Service: AWS IoT
Deletes a topic rule destination.

Request Syntax
DELETE /destinations/arn+ HTTP/1.1

URI Request Parameters
The request requires the following URI parameters.
arn (p. 182)
The ARN of the topic rule destination to delete.

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 184)**

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

**targetType (p. 184)**

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

Valid Values: DEFAULT | THING_GROUP

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

**InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 186)

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. 186)

Whether to undeprecate a deprecated thing type. If true, the thing type will not be deprecated anymore and you can associate it with things.

Type: Boolean

Required: No

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500
InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 188)

Which audit checks are enabled and disabled for this account.

Type: String to AuditCheckConfiguration (p. 622) object map

auditNotificationTargetConfigurations (p. 188)

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

Type: String to AuditNotificationTarget (p. 631) object map

Valid Keys: SNS
roleArn (p. 188)

The ARN of the role that grants permission to AWS IoT to access information about your devices, policies, certificates, and other items as required 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DescribeAuditFinding

Service: AWS IoT

 Gets information about a single audit finding. Properties include the reason for noncompliance, the severity of the issue, and when the audit that returned the finding was started.

Request Syntax

GET /audit/findings/findingId HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

findingId (p. 190)

A unique identifier for a single audit finding. You can use this identifier to apply mitigation actions to the finding.


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

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

finding (p. 190)

The findings (results) of the audit.

Type: AuditFinding (p. 625) 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

ThrottlingException

The rate exceeds the limit.
HTTP Status Code: 429

See Also

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

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

Gets information about an audit mitigation task that is used to apply mitigation actions to a set of audit findings. Properties include the actions being applied, the audit checks to which they're being applied, the task status, and aggregated task statistics.

Request Syntax

GET /audit/mitigationactions/tasks/taskId HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

taskId (p. 193)

The unique identifier for the audit mitigation task.


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

{  
  "actionsDefinition": [  
    {  
      "actionParams": {  
        "addThingsToThingGroupParams": {  
          "overrideDynamicGroups": boolean,  
          "thingGroupNames": [ "string" ]  
        },  
        "enableIoTLoggingParams": {  
          "logLevel": "string",  
          "roleArnForLogging": "string"  
        },  
        "publishFindingToSnsParams": {  
          "topicArn": "string"  
        },  
        "replaceDefaultPolicyVersionParams": {  
          "templateName": "string"  
        },  
        "updateCACertificateParams": {  
          "action": "string"  
        },  
        "updateDeviceCertificateParams": {  
          "action": "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.

**actionsDefinition (p. 193)**

Specifies the mitigation actions and their parameters that are applied as part of this task.

Type: Array of MitigationAction (p. 715) objects

**auditCheckToActionsMapping (p. 193)**

Specifies the mitigation actions that should be applied to specific audit checks.

Type: String to array of strings map

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Length Constraints: Maximum length of 128.

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

**endTime (p. 193)**

The date and time when the task was completed or canceled.

Type: Timestamp

**startTime (p. 193)**

The date and time when the task was started.

Type: Timestamp
target (p. 193)
Identifies the findings to which the mitigation actions are applied. This can be by audit checks, by
audit task, or a set of findings.
Type: AuditMitigationActionsTaskTarget (p. 630) object

taskStatistics (p. 193)
Aggregate counts of the results when the mitigation tasks were applied to the findings for this audit
mitigation actions task.
Type: String to TaskStatisticsForAuditCheck (p. 776) object map

taskStatus (p. 193)
The current status of the task.
Type: String
Valid Values: IN_PROGRESS | COMPLETED | FAILED | CANCELED

Errors

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

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

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

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

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

• AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 197)

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. 197)**

- Detailed information about each check performed during this audit.
  - Type: String to AuditCheckDetails (p. 623) object map

**scheduledAuditName (p. 197)**

- The name of the scheduled audit (only if the audit was a scheduled audit).
  - Type: String
    - Pattern: [a-zA-Z0-9_\-]+

**taskStartTime (p. 197)**

- The time the audit started.
  - Type: Timestamp

**taskStatistics (p. 197)**

- Statistical information about the audit.
  - Type: TaskStatistics (p. 774) object

**taskStatus (p. 197)**

- The status of the audit: one of "IN_PROGRESS", "COMPLETED", "FAILED", or "CANCELED".
  - Type: String
  - Valid Values: IN_PROGRESS | COMPLETED | FAILED | CANCELED

**taskType (p. 197)**

- 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 200)

The name of the authorizer to describe.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "authorizerDescription": {  
    "authorizerArn": "string",
    "authorizerFunctionArn": "string",
    "authorizerName": "string",
    "creationDate": number,
    "lastModifiedDate": number,
    "signingDisabled": boolean,
    "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. 200)

The authorizer description.
Type: AuthorizerDescription (p. 635) object

Errors

InternalFailureException

An unexpected error has occurred.
HTTP Status Code: 500

InvalidRequestException

The request is not valid.
HTTP Status Code: 400

ResourceNotFoundException

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

ServiceUnavailableException

The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException

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

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 202)**

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. 202)**

The ARN of the billing group.

Type: String

**billingGroupId (p. 202)**

The ID of the billing group.
Type: String


Pattern: [a-zA-Z0-9\-_]+
billingGroupMetadata (p. 202)

Additional information about the billing group.

Type: BillingGroupMetadata (p. 644) object

billingGroupName (p. 202)

The name of the billing group.

Type: String


Pattern: [a-zA-Z0-9\-_]+
billingGroupProperties (p. 202)

The properties of the billing group.

Type: BillingGroupProperties (p. 645) object

version (p. 202)

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 Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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.

caCertificateId (p. 205)

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",
        "lastModifedDate": 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. 205)

The CA certificate description.

Type: CACertificateDescription (p. 647) object

registrationConfig (p. 205)

Information about the registration configuration.

Type: RegistrationConfig (p. 741) object

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 208)

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. 208)
The description of the certificate.
Type: CertificateDescription (p. 650) object

Errors

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

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

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

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

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

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

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
AWS IoT API Reference
DescribeCertificate

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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,
    "signingDisabled": boolean,
    "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. 211)
The default authorizer's description.

Type: AuthorizerDescription (p. 635) object

Errors

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

HTTP Status Code: 400
**ResourceNotFoundException**
The specified resource does not exist.

HTTP Status Code: 404
**ServiceUnavailableException**
The service is temporarily unavailable.

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

HTTP Status Code: 429
**UnauthorizedException**
You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

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

Service: AWS IoT

Provides details about a dimension that is defined in your AWS account.

Request Syntax

GET /dimensions/name HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

name (p. 213)

The unique identifier for the dimension.


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

{
  "arn": "string",
  "creationDate": number,
  "lastModifiedDate": number,
  "name": "string",
  "stringValues": [ "string" ],
  "type": "string"
}

Response Elements

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

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

arn (p. 213)

The ARN (Amazon resource name) for the dimension.

Type: String

creationDate (p. 213)

The date the dimension was created.

Type: Timestamp
**lastModifiedDate (p. 213)**

The date the dimension was last modified.

Type: Timestamp

**name (p. 213)**

The unique identifier for the dimension.

Type: String


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

**stringValues (p. 213)**

The value or list of values used to scope the dimension. For example, for topic filters, this is the pattern used to match the MQTT topic name.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Length Constraints: Minimum length of 1. Maximum length of 256.

**type (p. 213)**

The type of the dimension.

Type: String

Valid Values: `TOPIC_FILTER`

---

### Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

---

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
AWS Command Line Interface
AWS SDK for .NET
AWS SDK for C++
AWS SDK for Go
AWS SDK for Java
AWS SDK for JavaScript
AWS SDK for PHP V3
AWS SDK for Python
AWS SDK for Ruby V3
DescribeDomainConfiguration

Service: AWS IoT

Gets summary information about a domain configuration.

**Note**
The domain configuration feature is in public preview and is subject to change.

**Request Syntax**

```
GET /domainConfigurations/domainConfigurationName HTTP/1.1
```

**URI Request Parameters**

The request requires the following URI parameters.

`domainConfigurationName` *(p. 216)*

The name of the domain configuration.


Pattern: `[\w.:-]+`

**Request Body**

The request does not have a request body.

**Response Syntax**

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

{
  "authorizerConfig": {
    "allowAuthorizerOverride": boolean,
    "defaultAuthorizerName": "string"
  },
  "domainConfigurationArn": "string",
  "domainConfigurationName": "string",
  "domainConfigurationStatus": "string",
  "domainName": "string",
  "domainType": "string",
  "serverCertificates": [
    {
      "serverCertificateArn": "string",
      "serverCertificateStatus": "string",
      "serverCertificateStatusDetail": "string"
    }
  ],
  "serviceType": "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.
**authorizerConfig (p. 216)**

An object that specifies the authorization service for a domain.

Type: AuthorizerConfig (p. 634) object

**domainConfigurationArn (p. 216)**

The ARN of the domain configuration.

Type: String

**domainConfigurationName (p. 216)**

The name of the domain configuration.

Type: String


Pattern: [\w.:-]+

**domainConfigurationStatus (p. 216)**

A Boolean value that specifies the current state of the domain configuration.

Type: String

Valid Values: ENABLED | DISABLED

**domainName (p. 216)**

The name of the domain.

Type: String


**domainType (p. 216)**

The type of the domain.

Type: String

Valid Values: ENDPOINT | AWS_MANAGED | CUSTOMER_MANAGED

**serverCertificates (p. 216)**

A list containing summary information about the server certificate included in the domain configuration.

Type: Array of ServerCertificateSummary (p. 758) objects

**serviceType (p. 216)**

The type of service delivered by the endpoint.

Type: String

Valid Values: DATA | CREDENTIAL_PROVIDER | JOBS

**Errors**

**InternalFailureException**

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

The specified resource does not exist.

HTTP Status Code: 404
**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429
**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 219)

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.

We strongly recommend that customers use the newer iot:Data-ATS endpoint type to avoid issues related to the widespread distrust of Symantec certificate authorities.

Length Constraints: Maximum length of 128.

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. 219)

The endpoint. The format of the endpoint is as follows: identifier.iot.region.amazonaws.com.

Type: String
Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 221)

The creation date of the event configuration.

Type: Timestamp

eventConfigurations (p. 221)

The event configurations.

Type: String to Configuration (p. 661) 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. 221)

The date the event configurations were last modified.
Type: Timestamp

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 223)
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. 223)
The index name.
Type: String
Pattern: [a-zA-Z0-9:_-]+

indexStatus (p. 223)
The index status.
Type: String

Valid Values: ACTIVE | BUILDING | REBUILDING

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.

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 226)
The unique identifier you assigned to this job when it was created.
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: [a-zA-Z0-9_\-]+

Request Body
The request does not have a request body.

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

{
   "documentSource": "string",
   "job": {
      "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. 226)**

An S3 link to the job document.

Type: String


**job (p. 226)**

Information about the job.

Type: Job (p. 691) object

### Errors

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404
ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

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

Describes a job execution.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

**executionNumber (p. 229)**
A string (consisting of the digits "0" through "9") which is used to specify a particular job execution on a particular device.

**jobId (p. 229)**
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. 229)**
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

```plaintext
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",
    }
}
```

229
"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. 229)

Information about the job execution.

Type: JobExecution (p. 694) object

Errors

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

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

Service: AWS IoT

Gets information about a mitigation action.

Request Syntax

GET /mitigationactions/actions/actionName HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

actionName (p. 231)

The friendly name that uniquely identifies the mitigation action.

Length Constraints: Maximum length of 128.

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

{
  "actionArn": "string",
  "actionId": "string",
  "actionName": "string",
  "actionParams": {
    "addToDevicePolicyParams": {
      "devicePolicyName": "string",
      "version": "string",
      "replacement": "string"
    },
    "enableIoTLoggingParams": {
      "logLevel": "string",
      "roleArnForLogging": "string"
    },
    "publishFindingToSnsParams": {
      "topicArn": "string"
    },
    "replaceDefaultPolicyVersionParams": {
      "templateName": "string"
    },
    "updateCACertificateParams": {
      "action": "string"
    },
    "updateDeviceCertificateParams": {
      "action": "string"
    }
  },
  "actionType": "string",
  "creationDate": number
}
"lastModifiedDate": number,
"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.

actionArn (p. 231)

The ARN that identifies this migration action.

Type: String

actionId (p. 231)

A unique identifier for this action.

Type: String

actionName (p. 231)

The friendly name that uniquely identifies the mitigation action.

Type: String

Length Constraints: Maximum length of 128.

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

actionParams (p. 231)

Parameters that control how the mitigation action is applied, specific to the type of mitigation action.

Type: MitigationActionParams (p. 717) object

actionType (p. 231)

The type of mitigation action.

Type: String

Valid Values: UPDATE_DEVICE_CERTIFICATE | UPDATE_CA_CERTIFICATE | ADD_THINGS_TO_THING_GROUP | REPLACE_DEFAULT_POLICY_VERSION | ENABLE_IOT_LOGGING | PUBLISH_FINDING_TO_SNS

creationDate (p. 231)

The date and time when the mitigation action was added to your AWS account.

Type: Timestamp

lastModifiedDate (p. 231)

The date and time when the mitigation action was last changed.

Type: Timestamp

roleArn (p. 231)

The ARN of the IAM role used to apply this action.

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DescribeProvisioningTemplate

Service: AWS IoT

Returns information about a fleet provisioning template.

Request Syntax

GET /provisioning-templates/{templateName} HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

**templateName (p. 234)**

The name of the fleet provisioning template.
Pattern: ^[0-9A-Za-z_\-]+$

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

```
{
    "creationDate": number,
    "defaultVersionId": number,
    "description": "string",
    "enabled": boolean,
    "lastModifiedDate": number,
    "provisioningRoleArn": "string",
    "templateArn": "string",
    "templateBody": "string",
    "templateName": "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. 234)**

The date when the fleet provisioning template was created.
Type: Timestamp

**defaultVersionId (p. 234)**

The default fleet template version ID.
**Type:** Integer

**description (p. 234)**

The description of the fleet provisioning template.

**Type:** String

Length Constraints: Minimum length of 0. Maximum length of 500.

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

**enabled (p. 234)**

True if the fleet provisioning template is enabled, otherwise false.

**Type:** Boolean

**lastModifiedDate (p. 234)**

The date when the fleet provisioning template was last modified.

**Type:** Timestamp

**provisioningRoleArn (p. 234)**

The ARN of the role associated with the provisioning template. This IoT role grants permission to provision a device.

**Type:** String


**templateArn (p. 234)**

The ARN of the fleet provisioning template.

**Type:** String

**templateBody (p. 234)**

The JSON formatted contents of the fleet provisioning template.

**Type:** String

**templateName (p. 234)**

The name of the fleet provisioning template.

**Type:** String


Pattern: ^[0-9A-Za-z_\-]+$

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.
HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

Returns information about a fleet provisioning template version.

Request Syntax

```plaintext
GET /provisioning-templates/TemplateName/versions/VersionId HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**TemplateName (p. 237)**

The template name.


Pattern: `^[0-9A-Za-z_-]+$`

**VersionId (p. 237)**

The fleet provisioning template version ID.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "creationDate": number,
  "isDefaultVersion": boolean,
  "templateBody": "string",
  "versionId": 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. 237)**

The date when the fleet provisioning template version was created.

Type: Timestamp

**isDefaultVersion (p. 237)**

True if the fleet provisioning template version is the default version.
Type: Boolean

**templateBody (p. 237)**

The JSON formatted contents of the fleet provisioning template version.

Type: String

**versionId (p. 237)**

The fleet provisioning template version ID.

Type: Integer

### Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

### See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 239)

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. 239)

The role alias description.

Type: RoleAliasDescription (p. 747) object
Errors

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

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

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

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

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

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

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 241)

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. 241)

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. 241)

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. 241)

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

Type: String

Valid Values: DAILY | WEEKLY | BIWEEKLY | MONTHLY

scheduledAuditArn (p. 241)

The ARN of the scheduled audit.

Type: String

scheduledAuditName (p. 241)

The name of the scheduled audit.

Type: String


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

targetCheckNames (p. 241)

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 use 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 244)**

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" ],
    "additionalMetricsToRetainV2": [
        {  
            "metric": "string",
            "metricDimension": {
                "dimensionName": "string",
                "operator": "string"
            }
        }
    ],
    "alertTargets": {
        "string": {
            "alertTargetArn": "string",
            "roleArn": "string"
        }
    },
    "behaviors": [
        {  
            "criteria": {
                "comparisonOperator": "string",
                "consecutiveDatapointsToAlarm": number,
                "consecutiveDatapointsToClear": number,
                "durationSeconds": number,
                "statisticalThreshold": {
                    "statistic": "string"
                },
                "value": {
```
Response Elements

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. 244)**

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.

Note: This API field is deprecated. Please use DescribeSecurityProfile:additionalMetricsToRetainV2 (p. 245) instead.

Type: Array of strings

**additionalMetricsToRetainV2 (p. 244)**

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 MetricToRetain (p. 713) objects

**alertTargets (p. 244)**

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

Type: String to AlertTarget (p. 616) object map

Valid Keys: SNS

**behaviors (p. 244)**

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

Type: Array of Behavior (p. 641) objects

Array Members: Maximum number of 100 items.

**creationDate (p. 244)**

The time the security profile was created.

Type: Timestamp
lastModifiedDate (p. 244)

The time the security profile was last modified.

Type: Timestamp

securityProfileArn (p. 244)

The ARN of the security profile.

Type: String

securityProfileDescription (p. 244)

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. 244)

The name of the security profile.

Type: String


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

version (p. 244)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 248)**

The stream ID.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

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

Response Elements

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

The following data is returned in JSON format by the service.
streamInfo (p. 248)

Information about the stream.

Type: StreamInfo (p. 770) object

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 250)**

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. 250)**

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. 250)**

The name of the billing group the thing belongs to.  
Type: String  
Pattern: [a-zA-Z0-9:_-]+  

**defaultClientId (p. 250)**

The default MQTT client ID. For a typical device, the thing name is also used as the default MQTT client ID. Although we don’t require a mapping between a thing’s registry name and its use of MQTT client IDs, certificates, or shadow state, we recommend that you choose a thing name and use it as the MQTT client ID for the registry and the Device Shadow service.  
This lets you better organize your AWS IoT fleet without removing the flexibility of the underlying device certificate model or shadows.  
Type: String  

**thingArn (p. 250)**

The ARN of the thing to describe.  
Type: String  

**thingId (p. 250)**

The ID of the thing to describe.  
Type: String  

**thingName (p. 250)**

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

**thingTypeName (p. 250)**

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

**version (p. 250)**

The current version of the thing record in the registry.  

**Note**

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

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 253)**

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. 253)**

The dynamic thing group index name.

Type: String


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

**queryString (p. 253)**

The dynamic thing group search query string.

Type: String

Length Constraints: Minimum length of 1.

**queryVersion (p. 253)**

The dynamic thing group query version.

Type: String

**status (p. 253)**

The dynamic thing group status.

Type: String

Valid Values: ACTIVE | BUILDING | REBUILDING

**thingGroupArn (p. 253)**

The thing group ARN.

Type: String

**thingGroupId (p. 253)**

The thing group ID.

Type: String


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

**thingGroupMetadata (p. 253)**

Thing group metadata.

Type: ThingGroupMetadata (p. 785) object

**thingGroupName (p. 253)**

The name of the thing group.
Type: String


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

**thingGroupProperties (p. 253)**

The thing group properties.

Type: **ThingGroupProperties (p. 786)** object

**version (p. 253)**

The version of the thing group.

Type: Long

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 256)

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. 256)

The task creation date.

Type: Timestamp

failureCount (p. 256)

The number of things that failed to be provisioned.
Type: Integer
inputFileBucket (p. 256)
The S3 bucket that contains the input file.
Type: String
Pattern: [a-zA-Z0-9._-]+

inputFileKey (p. 256)
The input file key.
Type: String
Pattern: [a-zA-Z0-9!_.*'()-/]+

lastModifiedDate (p. 256)
The date when the task was last modified.
Type: Timestamp

message (p. 256)
The message.
Type: String
Length Constraints: Maximum length of 2048.

percentageProgress (p. 256)
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. 256)
The role ARN that grants access to the input file bucket.
Type: String

status (p. 256)
The status of the bulk thing provisioning task.
Type: String
Valid Values: InProgress | Completed | Failed | Cancelled | Cancelling

successCount (p. 256)
The number of things successfully provisioned.
Type: Integer

taskId (p. 256)
The task ID.
Type: String
Length Constraints: Maximum length of 40.

**templateBody (p. 256)**
The task's template.

**Errors**

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

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

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

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

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

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 259)

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. 259)

The thing type ARN.

Type: String
thingTypeId (p. 259)

The thing type ID.

Type: String

thingTypeMetadata (p. 259)

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. 790) object

thingTypeName (p. 259)

The name of the thing type.

Type: String


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

thingTypeProperties (p. 259)

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

Type: ThingTypeProperties (p. 791) object

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

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

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**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. 262)*

The policy to detach.


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

**Request Body**

The request accepts the following data in JSON format.

*target (p. 262)*

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

Service: AWS IoT

Removes the specified policy from the specified certificate.

**Note:** This API is deprecated. Please use DetachPolicy (p. 262) 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. 264)**
  - The name of the policy to detach.
  - Pattern: `[\w+=,.@-]+`

- **principal (p. 264)**
  - The principal.
  - If the principal is a certificate, specify the certificate ARN. If the principal is an Amazon Cognito identity, specify the identity ID.

**Request Body**

The request does not have a request body.

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

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

**Errors**

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

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

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

Service: AWS IoT

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

**Request Syntax**

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

**URI Request Parameters**

The request requires the following URI parameters.

- **securityProfileName (p. 266)**
  - The security profile that is detached.
  - Pattern: [a-zA-Z0-9:_-]+

- **securityProfileTargetArn (p. 266)**
  - 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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

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

URI Request Parameters

The request requires the following URI parameters.

principal (p. 268)
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. 268)
The name of the thing.
Pattern: [a-zA-Z0-9:._-]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

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

InvalidRequestException
The request is not valid.
HTTP Status Code: 400
ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

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

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

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

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**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. 270)*
  - 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
EnableTopicRule
Service: AWS IoT
Enables the rule.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

**ruleName (p. 272)**

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

```plaintext
HTTP/1.1 200
```

Response Elements

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

Errors

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

Returns the approximate count of unique values that match the query.

Request Syntax

```
POST /indices/cardinality 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. 274)**

The field to aggregate.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**indexName (p. 274)**

The name of the index to search.

Type: String


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

Required: No

**queryString (p. 274)**

The search query.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**queryVersion (p. 274)**

The query version.
Type: String
Required: No

Response Syntax

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

**cardinality (p. 275)**

The approximate count of unique values that match the query.

Type: Integer

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 277)
The thing name.


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

Request Body

The request accepts the following data in JSON format.

cognitoIdentityPoolId (p. 277)
The Cognito identity pool ID.

  Type: String

  Required: No

principal (p. 277)
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. 277)

The effective policies.

Type: Array of EffectivePolicy (p. 669) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

LimitExceededException

A limit has been exceeded.

HTTP Status Code: 410

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401
See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetIndexingConfiguration
Service: AWS IoT
Gets the indexing 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": {
        "customFields": [
            {
                "name": "string",
                "type": "string"
            }
        ],
        "managedFields": [
            {
                "name": "string",
                "type": "string"
            }
        ],
        "thingGroupIndexingMode": "string"
    },
    "thingIndexingConfiguration": {
        "customFields": [
            {
                "name": "string",
                "type": "string"
            }
        ],
        "managedFields": [
            {
                "name": "string",
                "type": "string"
            }
        ],
        "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. 280)**

The index configuration.

Type: `ThingGroupIndexingConfiguration (p. 784)` object

**thingIndexingConfiguration (p. 280)**

Thing indexing configuration.

Type: `ThingIndexingConfiguration (p. 787)` object

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 283)**

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. 283)**

The job document content.

Type: String

Length Constraints: Maximum length of 32768.

Errors

**InvalidRequestException**

The request is not valid.
HTTP Status Code: 400
**ResourceNotFoundException**
The specified resource does not exist.

HTTP Status Code: 404
**ServiceUnavailableException**
The service is temporarily unavailable.

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

HTTP Status Code: 429

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 285)

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

roleArn (p. 285)

The ARN of the IAM role that grants access.
Type: String

Errors

InternalException

An unexpected error has occurred.

HTTP Status Code: 500
InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 287)**

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
    },
    "awsJobPresignedUrlConfig": {
      "expiresInSec": number
    },
    "creationDate": number,
    "description": "string",
    "errorInfo": {
      "code": "string",
      "message": "string"
    },
    "lastModifiedDate": number,
    "otaUpdateArn": "string",
    "otaUpdateFiles": [
      {
        "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"
},
"otaUpdateId": "string",
"otaUpdateStatus": "string",
"protocols": [ "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. 287)**

The OTA update info.

Type: **OTAUpdateInfo (p. 722)** object
Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

Groups the aggregated values that match the query into percentile groupings. The default percentile groupings are: 1, 5, 25, 50, 75, 95, 99, although you can specify your own when you call GetPercentiles. This function returns a value for each percentile group specified (or the default percentile groupings). The percentile group "1" contains the aggregated field value that occurs in approximately one percent of the values that match the query. The percentile group "5" contains the aggregated field value that occurs in approximately five percent of the values that match the query, and so on. The result is an approximation, the more values that match the query, the more accurate the percentile values.

Request Syntax

POST /indices/percentiles HTTP/1.1
Content-type: application/json

{
    "aggregationField": "string",
    "indexName": "string",
    "percents": [ number ],
    "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. 290)

The field to aggregate.

Type: String

Length Constraints: Minimum length of 1.

Required: No

indexName (p. 290)

The name of the index to search.

Type: String


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

Required: No

percents (p. 290)

The percentile groups returned.

Type: Array of doubles
Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

queryString (p. 290)

The query string.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

queryVersion (p. 290)

The query version.

Type: String

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "percentiles": [
    {
      "percent": number,
      "value": 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.

percentiles (p. 291)

The percentile values of the aggregated fields.

Type: Array of PercentPair (p. 728) objects

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 293)*

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. 293)*

The date the policy was created.

Type: Timestamp

**defaultVersionId** *(p. 293)*

The default policy version ID.

Type: String
Pattern: \d+  

generationId (p. 293)  
The generation ID of the policy.  
Type: String  

lastModifiedDate (p. 293)  
The date the policy was last modified.  
Type: Timestamp  

policyArn (p. 293)  
The policy ARN.  
Type: String  

policyDocument (p. 293)  
The JSON document that describes the policy.  
Type: String  

policyName (p. 293)  
The policy name.  
Type: String  
Pattern: \[\w+=,.@-]+  

Errors  

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

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

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

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

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

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 296)**

The name of the policy.


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

**policyVersionId (p. 296)**

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. 296)**

The date the policy was created.
GetPolicyVersion

Type: Timestamp
generationId (p. 296)
The generation ID of the policy version.
Type: String
isDefaultVersion (p. 296)
Specifies whether the policy version is the default.
Type: Boolean
lastModifiedDate (p. 296)
The date the policy was last modified.
Type: Timestamp
policyArn (p. 296)
The policy ARN.
Type: String
policyDocument (p. 296)
The JSON document that describes the policy.
Type: String
policyName (p. 296)
The policy name.
Type: String
Pattern: [\w+=,.@-]+
policyVersionId (p. 296)
The policy version ID.
Type: String
Pattern: [0-9]+

Errors

InternalFailureException
An unexpected error has occurred.
HTTP Status Code: 500
InvalidRequestException
The request is not valid.
HTTP Status Code: 400
ResourceNotFoundException
The specified resource does not exist.
HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.

HTTP Status Code: 401

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 299)`
  The CA certificate registration code.

  Type: String

  Length Constraints: Fixed length of 64.

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

Errors

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

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

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

Returns the count, average, sum, minimum, maximum, sum of squares, variance, and standard deviation for the specified aggregated field. If the aggregation field is of type String, only the count statistic is returned.

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. 301)

The aggregation field name.

Type: String

Length Constraints: Minimum length of 1.

Required: No

indexName (p. 301)

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

Type: String


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

Required: No

queryString (p. 301)

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. 301)

The version of the query used to search.

Type: String

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "statistics": {
        "average": number,
        "count": number,
        "maximum": number,
        "minimum": number,
        "stdDeviation": number,
        "sum": number,
        "sumOfSquares": number,
        "variance": 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. 302)

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

Type: Statistics (p. 765) 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**GetTopicRule**  
Service: AWS IoT  

Gets information about the rule.

**Request Syntax**

```plaintext
GET /rules/ruleName HTTP/1.1
```

**URI Request Parameters**

The request requires the following URI parameters.

**ruleName (p. 304)**

The name of the rule.

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

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

**Request Body**

The request does not have a request body.

**Response Syntax**

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

{
  "rule": {
    "actions": [
      "cloudwatchAlarm": {
        "alarmName": "string",
        "roleArn": "string",
        "stateReason": "string",
        "stateValue": "string"
      },
      "CloudWatchLogs": {
        "logGroupName": "string",
        "roleArn": "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": {
  "putItem": {
    "endpoint": "string",
    "id": "string",
    "index": "string",
    "roleArn": "string",
    "type": "string"
  },
  "firehose": {
    "deliveryStreamName": "string",
    "roleArn": "string",
    "separator": "string"
  },
  "http": {
    "auth": {
      "sigv4": {
        "roleArn": "string",
        "serviceName": "string",
        "signingRegion": "string"
      }
    },
    "confirmationUrl": "string",
    "headers": [
      {"key": "string",
      "value": "string"}
    ],
    "url": "string"
  },
  "iotAnalytics": {
    "channelArn": "string",
    "channelName": "string",
    "roleArn": "string"
  },
  "iotEvents": {
    "inputName": "string",
    "messageId": "string",
    "roleArn": "string"
  },
  "iotSiteWise": {
    "putAssetPropertyValueEntries": [
      {"assetId": "string",
      "entryId": "string",
      "propertyAlias": "string",
      "propertyId": "string",
      "propertyValues": [
        {"quality": "string",
        "timestamp": {
          "offsetInNanos": "string",
          "timeInSeconds": "string"
        },
        "value": {
        "string": "string"}}
      ]
    }
  }
GetTopicRule

```json

"booleanValue": "string",
"doubleValue": "string",
"integerValue": "string",
"stringValue": "string"

"roleArn": "string",
"kinesis": {
"partitionKey": "string",
"roleArn": "string",
"streamName": "string"
},
"lambda": {
"functionArn": "string"
},
"republish": {
"qos": number,
"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",
"createdAt": number,
"description": "string",
"errorAction": {
"cloudwatchAlarm": {
"alarmName": "string",
"roleArn": "string",
"stateReason": "string",
"stateValue": "string"
},
"cloudwatchLogs": {
"logGroupName": "string",
"roleArn": "string"
},
"cloudwatchMetric": {

```

306
```
"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"
},
"http": {
  "auth": {
    "sigv4": {
      "roleArn": "string",
      "serviceName": "string",
      "signingRegion": "string"
    }
  },
  "confirmationUrl": "string",
  "headers": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "url": "string"
},
"iotAnalytics": {
  "channelArn": "string",
  "channelName": "string",
  "roleArn": "string"
},
"iotEvents": {
  "inputName": "string",
  "messageId": "string",
  "roleArn": "string"
},
"iotSiteWise": {
  "putAssetPropertyValueEntries": [}
GetTopicRule

```
{
  "assetId": "string",
  "entryId": "string",
  "propertyAlias": "string",
  "propertyId": "string",
  "propertyValues": [
    {
      "quality": "string",
      "timestamp": {
        "offsetInNanos": "string",
        "timeInSeconds": "string"
      },
      "value": {
        "booleanValue": "string",
        "doubleValue": "string",
        "integerValue": "string",
        "stringValue": "string"
      }
    }
  ],
  "roleArn": "string"
},
"kinesis": {
  "partitionKey": "string",
  "roleArn": "string",
  "streamName": "string"
},
"lambda": {
  "functionArn": "string"
},
"republish": {
  "qos": number,
  "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"
```
Response Elements

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. 304)**

The rule.

Type: TopicRule (p. 794) object

**ruleArn (p. 304)**

The rule ARN.

Type: String

Errors

**InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

Service: AWS IoT

Gets information about a topic rule destination.

Request Syntax

GET /destinations/arn+ HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

arn (p. 311)

The ARN of the topic rule destination.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "topicRuleDestination": {
      "arn": "string",
      "httpUrlProperties": {
         "confirmationUrl": "string"
      },
      "status": "string",
      "statusReason": "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.

**topicRuleDestination (p. 311)**

The topic rule destination.

Type: TopicRuleDestination (p. 796) object

Errors

**InternalException**

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

The request is not valid.

HTTP Status Code: 400
**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 313)
The default log level.
Type: String
Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED

disableAllLogs (p. 313)
Disables all logs.
Type: Boolean

roleArn (p. 313)
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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 315)

The maximum number of results to return at one time.

nextToken (p. 315)

The token for the next set of results.

securityProfileName (p. 315)

The name of the Device Defender security profile for which violations are listed.
Pattern: \[a-zA-Z0-9:_-]+\]

thingName (p. 315)

The name of the thing whose active violations are listed.

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",
"metricDimension": {
    "dimensionName": "string",
    "operator": "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. 315)

The list of active violations.

Type: Array of ActiveViolation (p. 613) objects

nextToken (p. 315)

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 Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
ListAttachedPolicies
Service: AWS IoT

Lists the policies attached to the specified thing group.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

- **marker** (p. 318)
  
  The token to retrieve the next set of results.
  
  Pattern: `[A-Za-z0-9+/]+={0,2}`

- **pageSize** (p. 318)
  
  The maximum number of results to be returned per request.
  

- **recursive** (p. 318)
  
  When true, recursively list attached policies.

- **target** (p. 318)
  
  The group or principal for which the policies will be listed.

Request Body

The request does not have a request body.

Response Syntax

```plaintext
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. 318)**

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. 318)**

The policies.

Type: Array of Policy (p. 729) objects

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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",
      "iamRoleArn": "string",
      "policyVersionIdentifier": {
        "policyName": "string",
        "policyVersionId": "string"
      },
      "roleAliasArn": "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. 321)

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

Type: String

Required: No

endTime (p. 321)

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. 321)

The maximum number of results to return at one time. The default is 25.
Type: Integer
Required: No

nextToken (p. 321)
The token for the next set of results.
Type: String
Required: No

resourceIdentifier (p. 321)
Information identifying the noncompliant resource.
Type: ResourceIdentifier (p. 745) object
Required: No

startTime (p. 321)
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. 321)
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",
      "findingId": "string",
      "findingTime": number,
      "nonCompliantResource": {
         "additionalInfo": {
            "string": "string"
         },
         "resourceIdentifier": {
            "account": "string",
            "caCertificateId": "string",
            "clientId": "string",
            "cognitoIdentityPoolId": "string",
            "deviceCertificateId": "string"
         }
   }
]
ListAuditFindings

```
"iamRoleArn": "string",
"policyVersionIdentifier": {
  "policyName": "string",
  "policyVersionId": "string"
},
"roleAliasArn": "string"
"resourceType": "string"
"reasonForNonCompliance": "string",
"reasonForNonComplianceCode": "string",
"relatedResources": [  
  "additionalInfo": {  
    "string": "string"
  },
  "resourceIdentifier": {  
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "policyVersionIdentifier": {  
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "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. 322)

The findings (results) of the audit.

Type: Array of AuditFinding (p. 625) objects

nextToken (p. 322)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListAuditMitigationActionsExecutions

Service: AWS IoT

Gets the status of audit mitigation action tasks that were executed.

Request Syntax

```
GET /audit/mitigationactions/executions?
actionStatus=actionStatus&findingId=findingId&maxResults=maxResults&nextToken=nextToken&taskId=taskId
HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**actionStatus (p. 325)**

Specify this filter to limit results to those with a specific status.

Valid Values: IN_PROGRESS | COMPLETED | FAILED | CANCELED | SKIPPED | PENDING

**findingId (p. 325)**

Specify this filter to limit results to those that were applied to a specific audit finding.


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

**maxResults (p. 325)**

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


**nextToken (p. 325)**

The token for the next set of results.

**taskId (p. 325)**

Specify this filter to limit results to actions for a specific audit mitigation actions task.


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
{
   "actionsExecutions": [
```

325
"actionId": "string",
"actionName": "string",
"endTime": number,
"errorCode": "string",
"findingId": "string",
"message": "string",
"startTime": number,
"status": "string",
"taskId": "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.

**actionsExecutions (p. 325)**

A set of task execution results based on the input parameters. Details include the mitigation action applied, start time, and task status.

Type: Array of AuditMitigationActionExecutionMetadata (p. 627) objects

**nextToken (p. 325)**

The token for the next set of 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 Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
**ListAuditMitigationActionsTasks**

Service: AWS IoT

Gets a list of audit mitigation action tasks that match the specified filters.

**Request Syntax**

```
GET /audit/mitigationactions/tasks?
  auditTaskId=auditTaskId&endTime=endTime&findingId=findingId&maxResults=maxResults&nextToken=nextToken&
  startTime=startTime&taskStatus=taskStatus
```

**HTTP/1.1**

**URI Request Parameters**

The request requires the following URI parameters.

**auditTaskId (p. 328)**

Specify this filter to limit results to tasks that were applied to results for a specific audit.


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

**endTime (p. 328)**

Specify this filter to limit results to tasks that were completed or canceled on or before a specific date and time.

**findingId (p. 328)**

Specify this filter to limit results to tasks that were applied to a specific audit finding.


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

**maxResults (p. 328)**

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


**nextToken (p. 328)**

The token for the next set of results.

**startTime (p. 328)**

Specify this filter to limit results to tasks that began on or after a specific date and time.

**taskStatus (p. 328)**

Specify this filter to limit results to tasks that are in a specific state.

Valid Values: IN_PROGRESS | COMPLETED | FAILED | CANCELED

**Request Body**

The request does not have a request body.
Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "nextToken": "string",
   "tasks": [
      {
         "startTime": number,
         "taskId": "string",
         "taskStatus": "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. 329)

The token for the next set of results.

Type: String
tasks (p. 329)

The collection of audit mitigation tasks that matched the filter criteria.

Type: Array of AuditMitigationActionsTaskMetadata (p. 629) 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 IoT API Reference
ListAuditMitigationActionsTasks

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**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. 331)**

The end of the time period.

**maxResults (p. 331)**

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


**nextToken (p. 331)**

The token for the next set of results.

**startTime (p. 331)**

The beginning of the time period. 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. 331)**

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. 331)**

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. 331)

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. 331)

The audits that were performed during the specified time period.

Type: Array of AuditTaskMetadata (p. 632) 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 334)
Return the list of authorizers in ascending alphabetical order.

marker (p. 334)
A marker used to get the next set of results.

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

pageSize (p. 334)
The maximum number of results to return at one time.


status (p. 334)
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. 334)**

The authorizers.

Type: Array of **AuthorizerSummary (p. 637) objects**

**nextMarker (p. 334)**

A marker used to get the next set of results.

Type: String

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

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V3
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. 337)
The maximum number of results to return per request.
namePrefixFilter (p. 337)
Limit the results to billing groups whose names have the given prefix.
Pattern: [a-zA-Z0-9-_]+
nextToken (p. 337)
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.
ListBillingGroups

billingGroups (p. 337)

The list of billing groups.

Type: Array of GroupNameAndArn (p. 678) objects

nextToken (p. 337)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 339)
Determines the order of the results.
marker (p. 339)
The marker for the next set of results.
Pattern: [A-Za-z0-9+/]{0,2}
pageSize (p. 339)
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. 339)**

The CA certificates registered in your AWS account.

Type: Array of `CACertificate (p. 646)` objects

**nextMarker (p. 339)**

The current position within the list of CA certificates.

Type: String

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

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 342)

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

marker (p. 342)

The marker for the next set of results.

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

pageSize (p. 342)

The result page size.


Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

```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. 342)**

The descriptions of the certificates.

Type: Array of Certificate (p. 649) objects

**nextMarker (p. 342)**

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

Type: String

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

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V3
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. 345)**

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

**caCertificateId (p. 345)**

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. 345)**

The marker for the next set of results.

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

**pageSize (p. 345)**

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. 345)
The device certificates signed by the specified CA certificate.

Type: Array of Certificate (p. 649) objects

nextMarker (p. 345)
The marker for the next set of results, or null if there are no additional results.

Type: String

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

Errors

InternalFailureException
An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException
The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException
The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

Service: AWS IoT

List the set of dimensions that are defined for your AWS account.

Request Syntax

GET /dimensions?maxResults=maxResults&nextToken=nextToken HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 348)

The maximum number of results to retrieve at one time.


nextToken (p. 348)

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

{
    "dimensionNames": [ "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.

dimensionNames (p. 348)

A list of the names of the defined dimensions. Use DescribeDimension to get details for a dimension.

Type: Array of strings


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

nextToken (p. 348)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListDomainConfigurations

Service: AWS IoT

Gets a list of domain configurations for the user. This list is sorted alphabetically by domain configuration name.

**Note**
The domain configuration feature is in public preview and is subject to change.

**Request Syntax**

```
GET /domainConfigurations?marker=marker&pageSize=pageSize&serviceType=serviceType HTTP/1.1
```

**URI Request Parameters**

The request requires the following URI parameters.

- **marker (p. 350)**
  
  The marker for the next set of results.
  
  Pattern: `[A-Za-z0-9+/]+=\{0,2\}

- **pageSize (p. 350)**
  
  The result page size.
  

- **serviceType (p. 350)**
  
  The type of service delivered by the endpoint.
  
  Valid Values: DATA | CREDENTIAL_PROVIDER | JOBS

**Request Body**

The request does not have a request body.

**Response Syntax**

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

{
   "domainConfigurations": [
      {
         "domainConfigurationArn": "string",
         "domainConfigurationName": "string",
         "serviceType": "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.

**domainConfigurations (p. 350)**

A list of objects that contain summary information about the user's domain configurations.

Type: Array of DomainConfigurationSummary (p. 665) objects

**nextMarker (p. 350)**

The marker for the next set of results.

Type: String

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

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V3
**ListIndices**  
Service: AWS IoT  
Lists the search indices.

**Request Syntax**

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

**URI Request Parameters**

The request requires the following URI parameters.

- **maxResults (p. 353)**
  
  The maximum number of results to return at one time.
  

- **nextToken (p. 353)**
  
  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**

```plaintext
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. 353)**
  
  The index names.
  
  Type: Array of strings
  
  
  Pattern: `[a-zA-Z0-9:-]+`

- **nextToken (p. 353)**
  
  The token used to get the next set of results, or `null` if there are no additional results.
Type: String

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 355)

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. 355)

The maximum number of results to be returned per request.


nextToken (p. 355)

The token to retrieve the next set of results.

status (p. 355)

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"     }   ]
Response Elements

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. 355)**

A list of job execution summaries.

Type: Array of JobExecutionSummaryForJob (p. 700) objects

**nextToken (p. 355)**

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

Type: String

Errors

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 358)

The maximum number of results to be returned per request.


nextToken (p. 358)

The token to retrieve the next set of results.

status (p. 358)

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. 358)

The thing name.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "executionSummaries": [
    {
      "jobExecutionSummary": {
        "executionNumber": number,
        "lastUpdatedAt": number,
        "queuedAt": number,
        "startedAt": number,
        "status": "String"
      },
      "jobId": "string"
    }
  ]
}
Response Elements

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

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

**executionSummaries (p. 358)**

A list of job execution summaries.

Type: Array of `JobExecutionSummaryForThing (p. 701)` objects

**nextToken (p. 358)**

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

Type: String

Errors

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 361)**

The maximum number of results to return per request.


**nextToken (p. 361)**

The token to retrieve the next set of results.

**status (p. 361)**

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. 361)**

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. 361)**

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


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

**thingGroupName (p. 361)**

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


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

HTTP/1.1 200
Content-type: application/json

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

Response Elements

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

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

jobs (p. 362)
A list of jobs.
Type: Array of JobSummary (p. 704) objects

nextToken (p. 362)
The token for the next set of results, or null if there are no additional results.
Type: String

Errors

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

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

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

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

See Also

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

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

Gets a list of all mitigation actions that match the specified filter criteria.

Request Syntax

GET /mitigationactions/actions?actionType=actionType&maxResults=maxResults&nextToken=nextToken HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

actionType (p. 364)
Specify a value to limit the result to mitigation actions with a specific action type.

Valid Values: UPDATE_DEVICE_CERTIFICATE | UPDATE_CA_CERTIFICATE | ADD_THINGS_TO_THING_GROUP | REPLACE_DEFAULT_POLICY_VERSION | ENABLE_IOT_LOGGING | PUBLISH_FINDING_TO_SNS

maxResults (p. 364)
The maximum number of results to return at one time. The default is 25.


nextToken (p. 364)
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

{   "actionIdentifiers": [   {       "actionArn": "string",       "actionName": "string",       "creationDate": 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.
**actionIdentifiers (p. 364)**

A set of actions that matched the specified filter criteria.

Type: Array of MitigationActionIdentifier (p. 716) objects

**nextToken (p. 364)**

The token for the next set of 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 366)
The maximum number of results to return at one time.

nextToken (p. 366)
A token used to retrieve the next set of results.

otaUpdateStatus (p. 366)
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.

366
nextToken (p. 366)

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

Type: String

otaUpdates (p. 366)

A list of OTA update jobs.

Type: Array of OTAUpdateSummary (p. 725) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 368)**

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

**marker (p. 368)**

The marker for the next set of results.

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

**pageSize (p. 368)**

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. 368)*

The marker for the next set of results.

Type: String

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

**outgoingCertificates** *(p. 368)*

The certificates that are being transferred but not yet accepted.

Type: Array of **OutgoingCertificate** *(p. 726)* objects

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- **AWS Command Line Interface**
- **AWS SDK for .NET**
- **AWS SDK for C++**
- **AWS SDK for Go**
- **AWS SDK for Java**
- **AWS SDK for JavaScript**
- **AWS SDK for PHP V3**
- **AWS SDK for Python**
• AWS SDK for Ruby V3
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. 371)
Specifies the order for results. If true, the results are returned in ascending creation order.

marker (p. 371)
The marker for the next set of results.
Pattern: [A-Za-z0-9+/]+={0,2}

pageSize (p. 371)
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. 371)
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. 371)**

The descriptions of the policies.

Type: Array of Policy (p. 729) objects

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

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

Lists the principals associated with the specified policy.

Note: This API is deprecated. Please use ListTargetsForPolicy (p. 399) 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. 373)**

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

**marker (p. 373)**

The marker for the next set of results.

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

**pageSize (p. 373)**

The result page size.


**policyName (p. 373)**

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. 373)
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. 373)
The descriptions of the principals.
Type: Array of strings

Errors

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

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

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

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

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

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

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 376)
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. 376)
The policy versions.
Type: Array of PolicyVersion (p. 730) objects

Errors

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

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**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. 318) 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. 378)
  Specifies the order for results. If true, results are returned in ascending creation order.

- `marker` (p. 378)
  The marker for the next set of results.

- `pageSize` (p. 378)
  The result page size.


- `principal` (p. 378)
  The principal.

**Request Body**

The request does not have a request body.

**Response Syntax**

```
HTTP/1.1 200
Content-type: application/json
{
    "nextMarker": "string",
    "policies": [
    {
        "policyArn": "string",
        "policyName": "string"
    }
    ]
}
```
Response Elements

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

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

**nextMarker** (p. 378)

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. 378)

The policies.

Type: Array of Policy (p. 729) objects

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 381)**

The maximum number of results to return in this operation.


**nextToken (p. 381)**

The token to retrieve the next set of results.

**principal (p. 381)**

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. 381)**

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

Type: String

**things (p. 381)**

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

Errors

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

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

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

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

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

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

See Also

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

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

Lists the fleet provisioning templates in your AWS account.

Request Syntax

```plaintext
GET /provisioning-templates?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 383)

The maximum number of results to return at one time.


nextToken (p. 383)

A token to retrieve the next set of results.

Request Body

The request does not have a request body.

Response Syntax

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

{  
    "nextToken": "string",
    "templates": [
        {  
            "creationDate": number,
            "description": "string",
            "enabled": boolean,
            "lastModifiedDate": number,
            "templateArn": "string",
            "templateName": "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. 383)

A token to retrieve the next set of results.

Type: String
templates (p. 383)
A list of fleet provisioning templates
Type: Array of ProvisioningTemplateSummary (p. 733) 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

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

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

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

Service: AWS IoT

A list of fleet provisioning template versions.

Request Syntax

```
GET /provisioning-templates/{templateName}/versions?maxResults={maxResults}&nextToken={nextToken}
HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 385)

The maximum number of results to return at one time.


nextToken (p. 385)

A token to retrieve the next set of results.

templateName (p. 385)

The name of the fleet provisioning template.


Pattern: `^[0-9A-Za-z_\-]+$`

Request Body

The request does not have a request body.

Response Syntax

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

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

Response Elements

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. 385)
   A token to retrieve the next set of results.
   Type: String

versions (p. 385)
   The list of fleet provisioning template versions.
   Type: Array of ProvisioningTemplateVersionSummary (p. 735) 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

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

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**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. 387)**
  
  Return the list of role aliases in ascending alphabetical order.

- **marker (p. 387)**
  
  A marker used to get the next set of results.
  
  Pattern: \[A-Za-z0-9+/\]+={0,2}\)

- **pageSize (p. 387)**
  
  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. 387)**
  
  A marker used to get the next set of results.
  
  Type: String
  
  Pattern: \[A-Za-z0-9+/\]+={0,2}\)
roleAliases (p. 387)

The role aliases.

Type: Array of strings


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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 389)

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


nextToken (p. 389)

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": [
{  
"dayOfMatrix": "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. 389)

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. 389)

The list of scheduled audits.

Type: Array of ScheduledAuditMetadata (p. 753) 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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?dimensionName=dimensionName&maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

**dimensionName (p. 391)**

A filter to limit results to the security profiles that use the defined dimension.


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

**maxResults (p. 391)**

The maximum number of results to return at one time.


**nextToken (p. 391)**

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. 391)
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. 391)
A list of security profile identifiers (names and ARNs).
Type: Array of SecurityProfileIdentifier (p. 755) 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 393)

The maximum number of results to return at one time.

nextToken (p. 393)

The token for the next set of results.

recursive (p. 393)

If true, return child groups too.

securityProfileTargetArn (p. 393)

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. 393)**

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. 393)**

A list of security profiles and their associated targets.

Type: Array of `SecurityProfileTargetMapping (p. 757)` 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 395)
Set to true to return the list of streams in ascending order.

maxResults (p. 395)
The maximum number of results to return at a time.

nextToken (p. 395)
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. 395)
A token used to get the next set of results.
Type: String

streams (p. 395)

A list of streams.

Type: Array of StreamSummary (p. 772) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 397)

The token to retrieve the next set of results.

resourceArn (p. 397)

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. 397)

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

Type: String
tags (p. 397)

The list of tags assigned to the resource.

Type: Array of Tag (p. 773) 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 399)**
  
  A marker used to get the next set of results.
  
  Pattern: `[A-Za-z0-9+/]=\{0,2\}`

- **pageSize (p. 399)**
  
  The maximum number of results to return at one time.
  

- **policyName (p. 399)**
  
  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. 399)**
  
  A marker used to get the next set of results.
Type: String

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

targets (p. 399)
The policy targets.

Errors

InternalFailureException
An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException
The request is not valid.

HTTP Status Code: 400

LimitExceededException
A limit has been exceeded.

HTTP Status Code: 410

ResourceNotFoundException
The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 402)

The maximum number of results to return at one time.


nextToken (p. 402)

The token for the next set of results.

securityProfileName (p. 402)

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. 402)
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. 402)
The thing groups to which the security profile is attached.
Type: Array of SecurityProfileTarget (p. 756) 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 404)
The maximum number of results to return at one time.

namePrefixFilter (p. 404)
A filter that limits the results to those with the specified name prefix.
Pattern: [a-zA-Z0-9:_-]+

nextToken (p. 404)
The token to retrieve the next set of results.

parentGroup (p. 404)
A filter that limits the results to those with the specified parent group.
Pattern: [a-zA-Z0-9:_-]+

recursive (p. 404)
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": [
    { "groupName": "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. 404)**

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

Type: String

**thingGroups (p. 404)**

The thing groups.

Type: Array of GroupNameAndArn (p. 678) objects

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 406)**
  The maximum number of results to return at one time.

- **nextToken (p. 406)**
  The token to retrieve the next set of results.

- **thingName (p. 406)**
  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. 406)**

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

Type: String

**thingGroups (p. 406)**

The thing groups.

Type: Array of `GroupNameAndArn (p. 678)` objects

---

### Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

---

### See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**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. 408)**

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. 408)**

The principals associated with the thing.

Type: Array of strings

**Errors**

**InternalFailureException**

An unexpected error has occurred.

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

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

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

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

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

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 410)

The maximum number of results to return per request.


nextToken (p. 410)

The token to retrieve the next set of results.

reportType (p. 410)

The type of task report.

Valid Values: ERRORS | RESULTS

taskId (p. 410)

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. 410)

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

Type: String

reportType (p. 410)

The type of task report.

Type: String

Valid Values: ERRORS | RESULTS

resourceLinks (p. 410)

Links to the task resources.

Type: Array of strings

Length Constraints: Maximum length of 65535.

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

List bulk thing provisioning tasks.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 413)

The maximum number of results to return at one time.


nextToken (p. 413)

The token to retrieve the next set of results.

status (p. 413)

The status of the bulk thing provisioning task.

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

Request Body

The request does not have a request body.

Response Syntax

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

{
   "nextToken": "string",
   "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. 413)

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

Type: String
taskIds (p. 413)

A list of bulk thing provisioning task IDs.

Type: Array of strings

Length Constraints: Maximum length of 40.

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 415)**
  - The attribute name used to search for things.
  - Length Constraints: Maximum length of 128.
  - Pattern: `[a-zA-Z0-9\-_.,@/:#-]+`

- **attributeValue (p. 415)**
  - The attribute value used to search for things.
  - Length Constraints: Maximum length of 800.
  - Pattern: `[a-zA-Z0-9\-_.,@/:#-]*`

- **maxResults (p. 415)**
  - The maximum number of results to return in this operation.

- **nextToken (p. 415)**
  - The token to retrieve the next set of results.

- **thingTypeName (p. 415)**
  - 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. 415)

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

Type: String

things (p. 415)

The things.

Type: Array of ThingAttribute (p. 777) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

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

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**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. 418)**
  The name of the billing group.
  
  
  Pattern: `[a-zA-Z0-9:_-]+`

- **maxResults (p. 418)**
  The maximum number of results to return per request.
  

- **nextToken (p. 418)**
  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. 418)**
  
  The token used to get the next set of results, or null if there are no additional results.
  
  Type: String
**things (p. 418)**

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 420)**

The maximum number of results to return at one time.


**nextToken (p. 420)**

The token to retrieve the next set of results.

**recursive (p. 420)**

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

**thingGroupName (p. 420)**

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. 420)**

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

**things (p. 420)**

The things in the specified thing group.

Type: Array of strings


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

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 422)

The maximum number of results to return in this operation.

nextToken (p. 422)

The token to retrieve the next set of results.

thingTypeName (p. 422)

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. 422)

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

Type: String

thingTypes (p. 422)

The thing types.

Type: Array of ThingTypeDefinition (p. 789) 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 IoT API Reference
ListThingTypes

- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListTopicRuleDestinations

Service: AWS IoT

Lists all the topic rule destinations in your AWS account.

Request Syntax

GET /destinations?maxResults=maxResults&nextToken=nextToken HTTP/1.1

URI Request Parameters

The request requires the following URI parameters.

maxResults (p. 425)

The maximum number of results to return at one time.

Valid Range: Minimum value of 1. Maximum value of 1000.

nextToken (p. 425)

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

{
   "destinationSummaries": [
   {
      "arn": "string",
      "httpUrlSummary": {
         "confirmationUrl": "string"
      },
      "status": "string",
      "statusReason": "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.

destinationSummaries (p. 425)

Information about a topic rule destination.

Type: Array of TopicRuleDestinationSummary (p. 799) objects
nextToken (p. 425)

The token to retrieve the next set of results.

Type: String

Errors

**InternalException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 427)
The maximum number of results to return.
Valid Range: Minimum value of 1. Maximum value of 10000.

nextToken (p. 427)
A token used to retrieve the next value.

ruleDisabled (p. 427)
Specifies whether the rule is disabled.

topic (p. 427)
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. 427)

A token used to retrieve the next value.

Type: String

rules (p. 427)

The rules.

Type: Array of TopicRuleListItem (p. 801) objects

Errors

InternalException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 429)
The maximum number of results to return at one time.

nextToken (p. 429)
The token used to get the next set of results, or null if there are no additional results.

targetType (p. 429)
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

```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. 429)

The logging configuration for a target.
Type: Array of LogTargetConfiguration (p. 711) objects

nextToken (p. 429)

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

Errors

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

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

NotConfiguredException
The resource is not configured.
HTTP Status Code: 404

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

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 431)**

The end time for the alerts to be listed.

**maxResults (p. 431)**

The maximum number of results to return at one time.


**nextToken (p. 431)**

The token for the next set of results.

**securityProfileName (p. 431)**

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


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

**startTime (p. 431)**

The start time for the alerts to be listed.

**thingName (p. 431)**

A filter to limit results to those alerts caused by the specified thing.


Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/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",
      "metricDimension": {
        "dimensionName": "string",
        "operator": "string"
      },
      "name": "string"
    },
    "metricValue": {
      "cidrs": [ "string" ],
      "count": number,
      "ports": [ number ]
    },
    "securityProfileName": "string",
    "thingName": "string",
    "violationEventTime": number,
    "violationEventType": "string",
    "violationId": "string"
  }
]
HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

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

Registers a CA certificate with AWS IoT. This CA certificate can then be used to sign device certificates, which can be then registered with AWS IoT. You can register up to 10 CA certificates per AWS account that have the same subject field. This enables you to have up to 10 certificate authorities sign your device certificates. If you have more than one CA certificate registered, make sure you pass the CA certificate when you register your device certificates with the RegisterCertificate API.

Request Syntax

```
POST /cacertificate?allowAutoRegistration=allowAutoRegistration&setAsActive=setAsActive
HTTP/1.1
Content-type: application/json

{
   "caCertificate": "string",
   "registrationConfig": {
      "roleArn": "string",
      "templateBody": "string"
   },
   "verificationCertificate": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

allowAutoRegistration (p. 434)

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

setAsActive (p. 434)

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. 434)

The CA certificate.

Type: String


Required: Yes

registrationConfig (p. 434)

Information about the registration configuration.

Type: RegistrationConfig (p. 741) object

Required: No

verificationCertificate (p. 434)

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. 435)
   The CA certificate ARN.
   Type: String

certificateId (p. 435)
   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

LimitExceededException
   A limit has been exceeded.
HTTP Status Code: 410
**RegistrationCodeValidationException**
   The registration code is invalid.

HTTP Status Code: 400
**ResourceAlreadyExistsException**
   The resource already exists.

HTTP Status Code: 409
**ServiceUnavailableException**
   The service is temporarily unavailable.

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

HTTP Status Code: 429
**UnauthorizedException**
   You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

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

Service: AWS IoT

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

Request Syntax

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

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

URI Request Parameters

The request requires the following URI parameters.

**setAsActive (p. 437)**

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. 437)**

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

Type: String


Required: No

**certificatePem (p. 437)**

The certificate data, in PEM format.

Type: String


Required: Yes

**status (p. 437)**

The status of the register certificate request.

Type: String

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING_TRANSFER | REGISTER_INACTIVE | PENDING_ACTIVATION
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. 438)

The certificate ARN.
Type: String
certificateId (p. 438)

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

Errors

CertificateConflictException

Unable to verify the CA certificate used to sign the device certificate you are attempting to register. This happens when you have registered more than one CA certificate that has the same subject field and public key.

HTTP Status Code: 409

CertificateStateException

The certificate operation is not allowed.

HTTP Status Code: 406

CertificateValidationException

The certificate is invalid.

HTTP Status Code: 400

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500
InvalidRequestException

The request is not valid.
HTTP Status Code: 400

ResourceAlreadyExistsException

The resource already exists.
HTTP Status Code: 409

ServiceUnavailableException

The service is temporarily unavailable.
HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.
HTTP Status Code: 429

UnauthorizedException

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

See Also

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

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

Service: AWS IoT

Provisions a thing in the device registry. RegisterThing calls other AWS IoT control plane APIs. These calls might exceed your account level AWS IoT Throttling Limits and cause throttle errors. Please contact AWS Customer Support to raise your throttling limits if necessary.

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. 440)

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

    Type: String to string map

    Required: No

templateBody (p. 440)

    The provisioning template. See Provisioning Devices That Have Device Certificates 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. 440)

  Type: String

resourceArns (p. 440)

  ARNs for the generated resources.
  Type: String to string map

Errors

ConflictingResourceUpdateException

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

  HTTP Status Code: 409

InternalFailureException

  An unexpected error has occurred.

  HTTP Status Code: 500

InvalidRequestException

  The request is not valid.

  HTTP Status Code: 400

ResourceRegistrationFailureException

  The resource registration failed.

  HTTP Status Code: 400

ServiceUnavailableException

  The service is temporarily unavailable.

  HTTP Status Code: 503

ThrottlingException

  The rate exceeds the limit.

  HTTP Status Code: 429

UnauthorizedException

  You are not authorized to perform this operation.

  HTTP Status Code: 401
See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 342)` 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. 443)**
  
  The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)
  
  Length Constraints: Fixed length of 64.
  
  Pattern: `(0x)?[a-zA-F0-9]+`

Request Body

The request accepts the following data in JSON format.

- **rejectReason (p. 443)**
  
  The reason the certificate transfer was rejected.
  
  Type: String
  
  Length Constraints: Maximum length of 128.
  
  Required: No

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

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

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

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

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

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

TransferAlreadyCompletedException
You can't revert the certificate transfer because the transfer is already complete.
HTTP Status Code: 410

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

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 445)

The ARN of the billing group.

Type: String

Required: No

billingGroupName (p. 445)

The name of the billing group.

Type: String


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

Required: No

thingArn (p. 445)

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

Type: String

Required: No

thingName (p. 445)

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

Type: String

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

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

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

**Service:** AWS IoT

Remove the specified thing from the specified group.

**Request Syntax**

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

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

**URI Request Parameters**

The request does not use any URI parameters.

**Request Body**

The request accepts the following data in JSON format.

**thingArn (p. 447)**

The ARN of the thing to remove from the group.

Type: String

Required: No

**thingGroupArn (p. 447)**

The group ARN.

Type: String

Required: No

**thingGroupName (p. 447)**

The group name.

Type: String


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

Required: No

**thingName (p. 447)**

The name of the thing to remove from the group.

Type: String

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

Response Syntax

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

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

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

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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"
                },
                "cloudwatchLogs": {
                    "logGroupName": "string",
                    "roleArn": "string"
                },
                "CloudwatchMetric": {
                    "metricName": "string",
                    "metricNamespace": "string",
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                    "metricUnit": "string",
                    "metricValue": "string",
                    "roleArn": "string"
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                    "payloadField": "string",
                    "rangeKeyField": "string",
                    "rangeKeyType": "string",
                    "rangeKeyValue": "string",
                    "roleArn": "string",
                    "tableName": "string"
                },
                "dynamoDBv2": {
                    "putItem": {
                        "tableName": "string"
                    },
                    "roleArn": "string"
                },
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                    "endpoint": "string",
                    "id": "string",
                    "index": "string",
                    "roleArn": "string",
                    "type": "string"
                },
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                    "roleArn": "string",
                    "separator": "string"
                }
            }
        ]
    }
}
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},
"stepFunctions": {
  "executionNamePrefix": "string",
  "roleArn": "string",
  "stateMachineName": "string"
}
"awsIotSqlVersion": "string",
"description": "string",
"errorAction": {
  "cloudwatchAlarm": {
    "alarmName": "string",
    "roleArn": "string",
    "stateReason": "string",
    "stateValue": "string"
  },
  "cloudwatchLogs": {
    "logGroupName": "string",
    "logStreamName": "string",
    "roleArn": "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"}
"kinesis": {
  "partitionKey": "string",
  "roleArn": "string",
  "streamName": "string"
},
"lambda": {
  "functionArn": "string"
},
"republish": {
  "qos": number,
  "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. 449)**

The name of the rule.


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

Request Body

The request accepts the following data in JSON format.

**topicRulePayload (p. 449)**

The rule payload.
Type: TopicRulePayload (p. 802) 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 456)**

The search index name.

Type: String


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

Required: No

**maxResults (p. 456)**

The maximum number of results to return at one time.

Type: Integer


Required: No

**nextToken (p. 456)**

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

Type: String

Required: No

**queryString (p. 456)**

The search query string.
Type: String
Length Constraints: Minimum length of 1.
Required: Yes

**queryVersion (p. 456)**
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. 457)**
The token used to get the next set of results, or `null` if there are no additional results.

Type: String
thingGroups (p. 457)

The thing groups that match the search query.

Type: Array of ThingGroupDocument (p. 782) objects

things (p. 457)

The things that match the search query.

Type: Array of ThingDocument (p. 780) objects

Errors

IndexNotReadyException

The index is not ready.

HTTP Status Code: 400

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidQueryException

The query is invalid.

HTTP Status Code: 400

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 460)**

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. 460)**

The authorizer ARN.

Type: String
authorName (p. 460)

The authorizer name.

Type: String


Pattern: [\w=,\-]+

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 463)

The policy name.


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

policyVersionId (p. 463)

The policy version ID.

Pattern: [0-9]+

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400
ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 465)

The logging options payload.

Type: LoggingOptionsPayload (p. 709) object

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

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

The service is temporarily unavailable.

HTTP Status Code: 503

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 467)
   The log level.
   Type: String
   Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED
   Required: Yes

logTarget (p. 467)
   The log target.
   Type: LogTarget (p. 710) object
   Required: Yes

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

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

HTTP Status Code: 400
NotConfiguredException
The resource is not configured.

HTTP Status Code: 404
ServiceUnavailableException
The service is temporarily unavailable.

HTTP Status Code: 503

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
SetV2LoggingOptions

Service: AWS IoT

Sets the logging options for the V2 logging service.

Request Syntax

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

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

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**defaultLogLevel (p. 469)**

The default logging level.

Type: String

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

Required: No

**disableAllLogs (p. 469)**

If true all logs are disabled. The default is false.

Type: Boolean

Required: No

**roleArn (p. 469)**

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
StartAuditMitigationActionsTask

Service: AWS IoT

Starts a task that applies a set of mitigation actions to the specified target.

Request Syntax

```json
POST /audit/mitigationactions/tasks/taskId HTTP/1.1
Content-type: application/json

{
    "auditCheckToActionsMapping": {
        "string": [ "string" ]
    },
    "clientRequestToken": "string",
    "target": {
        "auditCheckToReasonCodeFilter": {
            "string": [ "string" ]
        },
        "auditTaskId": "string",
        "findingIds": [ "string" ]
    }
}
```

URI Request Parameters

The request requires the following URI parameters.

**taskId (p. 471)**

A unique identifier for the task. You can use this identifier to check the status of the task or to cancel it.


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

Request Body

The request accepts the following data in JSON format.

**auditCheckToActionsMapping (p. 471)**

For an audit check, specifies which mitigation actions to apply. Those actions must be defined in your AWS account.

Type: String to array of strings map

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Length Constraints: Maximum length of 128.

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

Required: Yes

**clientRequestToken (p. 471)**

Each audit mitigation task must have a unique client request token. If you try to start a new task with the same token as a task that already exists, an exception occurs. If you omit this value, a unique client request token is generated automatically.
StartAuditMitigationActionsTask

**Type:** String

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

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

**Required:** Yes

**target (p. 471)**

Specifies the audit findings to which the mitigation actions are applied. You can apply them to a type of audit check, to all findings from an audit, or to a specific set of findings.

**Type:** AuditMitigationActionsTaskTarget (p. 630) object

**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. 472)**

The unique identifier for the audit mitigation task. This matches the taskId that you specified in the request.

**Type:** String

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

**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

- **LimitExceededException**
  
  A limit has been exceeded.
HTTP Status Code: 410
**TaskAlreadyExistsException**

This exception occurs if you attempt to start a task with the same task-id as an existing task but with a different clientRequestToken.

HTTP Status Code: 400
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 474)

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. 474)

The ID of the on-demand audit you started.

Type: String

Pattern: \([a-zA-Z0-9\-\s]+\)

**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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 476)

The S3 bucket that contains the input file.

Type: String


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

Required: Yes

inputFileKey (p. 476)

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. 476)

The IAM role ARN that grants permission the input file.

Type: String


Required: Yes
templateBody (p. 476)

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. 477)

The bulk thing provisioning task ID.

Type: String

Length Constraints: Maximum length of 40.

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
StopThingRegistrationTask

Service: AWS IoT

Cancels a bulk thing provisioning task.

Request Syntax

```plaintext
PUT /thing-registration-tasks/taskId/cancel HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

taskId (p. 479)

The bulk thing provisioning task ID.

Length Constraints: Maximum length of 40.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429
UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

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. 481)
   The ARN of the resource.
   Type: String
   Required: Yes

tags (p. 481)
   The new or modified tags for the resource.
   Type: Array of Tag (p. 773) 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 483)
The MQTT client ID.

Request Body

The request accepts the following data in JSON format.

authInfos (p. 483)
A list of authorization info objects. Simulating authorization will create a response for each authInfo object in the list.

Type: Array of AuthInfo (p. 633) objects

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

Required: Yes

cognitoIdentityPoolId (p. 483)
The Cognito identity pool ID.

Type: String

Required: No

policyNamesToAdd (p. 483)
When testing custom authorization, the policies specified here are treated as if they are attached to the principal being authorized.
Type: Array of strings


Pattern: \[\w+=,.@-]+ \n
Required: No

policyNamesToSkip (p. 483)

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+=,.@-]+ \n
Required: No

principal (p. 483)

The principal.

Type: String

Required: No

Response Syntax

HTTP/1.1 200
Content-Type: application/json

{
  "authResults": [
    {
      "allowed": {
        "policies": [
          {
            "policyArn": "string",
            "policyName": "string"
          }
        ]
      },
      "authDecision": "string",
      "authInfo": {
        "actionType": "string",
        "resources": [ "string" ]
      }
    },
    "denied": {
      "explicitDeny": {
        "policies": [
          {
            "policyArn": "string",
            "policyName": "string"
          }
        ]
      },
      "implicitDeny": {
        "policies": [
          {
            "policyArn": "string"
          }
        ]
      }
    }
  ]
}
Response Elements

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. 484)

The authentication results.

Type: Array of AuthResult (p. 638) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

LimitExceededException

A limit has been exceeded.

HTTP Status Code: 410

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

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

See Also

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

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

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

{
    "httpContext": {
        "headers": {
            "string" : "string"
        },
        "queryString": "string"
    },
    "mqttContext": {
        "clientId": "string",
        "password": blob,
        "username": "string"
    },
    "tlsContext": {
        "serverName": "string"
    },
    "token": "string",
    "tokenSignature": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**authorizerName (p. 487)**

The custom authorizer name.


Pattern: [ \w=,@-]+

Request Body

The request accepts the following data in JSON format.

**httpContext (p. 487)**

Specifies a test HTTP authorization request.

Type: HttpContext (p. 683) object

Required: No

**mqttContext (p. 487)**

Specifies a test MQTT authorization request.

Type: MqttContext (p. 719) object
Required: No
tlsContext (p. 487)

Specifies a test TLS authorization request.
Type: TlsContext (p. 793) object

Required: No
token (p. 487)

The token returned by your custom authentication service.
Type: String


Required: No
tokenSignature (p. 487)

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: No

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. 488)

The number of seconds after which the connection is terminated.
Type: Integer

isAuthenticated (p. 488)

True if the token is authenticated, otherwise false.
Type: Boolean
**policyDocuments (p. 488)**

IAM policy documents.

Type: Array of strings

**principalId (p. 488)**

The principal ID.

Type: String


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

**refreshAfterInSeconds (p. 488)**

The number of seconds after which the temporary credentials are refreshed.

Type: Integer

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**InvalidResponseException**

The response is invalid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401
See Also

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

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

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. 491)
    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. 491)
    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. 491)
    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. 492)

The ARN of the certificate.

Type: String

Errors

CertificateStateException

The certificate operation is not allowed.

HTTP Status Code: 406

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

TransferConflictException

You can't transfer the certificate because authorization policies are still attached.
HTTP Status Code: 409

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 494)

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

tagKeys (p. 494)

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

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. 496)

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.

Some data collection might start 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. 622) object map

Required: No

auditNotificationTargetConfigurations (p. 496)

Information about the targets to which audit notifications are sent.

Type: String to AuditNotificationTarget (p. 631) object map
Valid Keys: SNS

Required: No

roleArn (p. 496)

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

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

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**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. 499)**
  
  The authorizer name.

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

**Request Body**

The request accepts the following data in JSON format.

- **authorizerFunctionArn (p. 499)**
  
  The ARN of the authorizer's Lambda function.

  - Type: String
  - Required: No

- **status (p. 499)**
  
  The status of the update authorizer request.

  - Type: String
  - Valid Values: ACTIVE | INACTIVE
  - Required: No

- **tokenKeyName (p. 499)**
  
  The key used to extract the token from the HTTP headers.

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

tokenSigningPublicKeys (p. 499)
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. 500)
The authorizer ARN.
Type: String

authorizerName (p. 500)
The authorizer name.
Type: String
Pattern: [\w=,:@-]+

Errors

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

LimitExceededException
A limit has been exceeded.
HTTP Status Code: 410

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

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

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

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

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

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

Service: AWS IoT

Updates information about the billing group.

Request Syntax

```plaintext
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. 502)

The name of the billing group.


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

Request Body

The request accepts the following data in JSON format.

billingGroupProperties (p. 502)

The properties of the billing group.

Type: BillingGroupProperties (p. 645) object

Required: Yes

expectedVersion (p. 502)

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
{
  "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. 502)

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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.

caCertificateId (p. 505)

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

newAutoRegistrationStatus (p. 505)

The new value for the auto registration status. Valid values are: "ENABLE" or "DISABLE".
Valid Values: ENABLE | DISABLE

newStatus (p. 505)

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. 505)

Information about the registration configuration.
Type: RegistrationConfig (p. 741) object
Required: No
removeAutoRegistration (p. 505)

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 Java
AWS IoT API Reference
UpdateCACertificate

- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateCertificate

Service: AWS IoT

Updates the status of the specified certificate. This operation is idempotent.

Moving a certificate from the ACTIVE state (including REVOKED) will not disconnect currently connected devices, but these devices will be unable to reconnect.

The ACTIVE state is required to authenticate devices connecting to AWS IoT using a certificate.

Request Syntax

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

URI Request Parameters

The request requires the following URI parameters.

certificateId (p. 508)

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. 508)

The new status.

**Note:** Setting the status to PENDING_TRANSFER or PENDING_ACTIVATION will result in an exception being thrown. PENDING_TRANSFER and PENDING_ACTIVATION are statuses used internally by AWS IoT. They are not intended for developer use.

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

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING_TRANSFER | REGISTER_INACTIVE | PENDING_ACTIVATION

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

CertificateStateException

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

InternalFailureException
An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException
The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException
The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException
The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException
The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException
You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

Service: AWS IoT

Updates the definition for a dimension. You cannot change the type of a dimension after it is created (you can delete it and re-create it).

Request Syntax

```
PATCH /dimensions/name HTTP/1.1
Content-type: application/json

{
    "stringValues": [ "string" ]
}
```

URI Request Parameters

The request requires the following URI parameters.

**name (p. 510)**

A unique identifier for the dimension. Choose something that describes the type and value to make it easy to remember what it does.


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

Request Body

The request accepts the following data in JSON format.

**stringValues (p. 510)**

Specifies the value or list of values for the dimension. For TOPIC_FILTER dimensions, this is a pattern used to match the MQTT topic (for example, "admin/#").

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

Response Syntax

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

{
    "arn": "string",
    "creationDate": number,
    "lastModifiedDate": number,
    "name": "string",
    "stringValues": [ "string" ]
}
```
"type": "string"
}

**Response Elements**

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

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

**arn (p. 510)**

The ARN (Amazon resource name) of the created dimension.

Type: String

**creationDate (p. 510)**

The date and time, in milliseconds since epoch, when the dimension was initially created.

Type: Timestamp

**lastModifiedDate (p. 510)**

The date and time, in milliseconds since epoch, when the dimension was most recently updated.

Type: Timestamp

**name (p. 510)**

A unique identifier for the dimension.

Type: String


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

**stringValues (p. 510)**

The value or list of values used to scope the dimension. For example, for topic filters, this is the pattern used to match the MQTT topic name.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Length Constraints: Minimum length of 1. Maximum length of 256.

**type (p. 510)**

The type of the dimension.

Type: String

Valid Values: `TOPIC_FILTER`

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500
**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**See Also**

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

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

Service: AWS IoT

Updates values stored in the domain configuration. Domain configurations for default endpoints can't be updated.

**Note**
The domain configuration feature is in public preview and is subject to change.

**Request Syntax**

```
PUT /domainConfigurations/dominName HTTP/1.1
Content-type: application/json

{
   "authorizerConfig": {
      "allowAuthorizerOverride": boolean,
      "defaultAuthorizerName": "string"
   },
   "domainConfigurationStatus": "string",
   "removeAuthorizerConfig": boolean
}
```

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

**domainConfigurationName (p. 513)**
The name of the domain configuration to be updated.


Pattern: [\w:-]+

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

**authorizerConfig (p. 513)**
An object that specifies the authorization service for a domain.

Type: AuthorizerConfig (p. 634) object

Required: No

**domainConfigurationStatus (p. 513)**
The status to which the domain configuration should be updated.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

**removeAuthorizerConfig (p. 513)**
Removes the authorization configuration from a domain.
Type: Boolean
Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "domainConfigurationArn": "string",
  "domainConfigurationName": "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.

domainConfigurationArn (p. 514)
The ARN of the domain configuration that was updated.
Type: String
domainConfigurationName (p. 514)
The name of the domain configuration that was updated.
Type: String
Pattern: [\w.-]+

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

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

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 516)**

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. 516)**

The expected version of the dynamic thing group to update.

Type: Long

Required: No

**indexName (p. 516)**

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. 516)**

The dynamic thing group search query string to update.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**queryVersion (p. 516)**

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. 516)**

The dynamic thing group properties to update.

Type: ThingGroupProperties (p. 786) object

Required: Yes

---

**Response Syntax**

```plaintext
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. 517)**

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 519)

The new event configuration values.

Type: String to Configuration (p. 661) 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 Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
UpdateIndexingConfiguration

Service: AWS IoT

Updates the search configuration.

Request Syntax

POST /indexing/config HTTP/1.1
Content-type: application/json

{
    "thingGroupIndexingConfiguration": {
        "customFields": [
            {
                "name": "string",
                "type": "string"
            }
        ],
        "managedFields": [
            {
                "name": "string",
                "type": "string"
            }
        ],
        "thingGroupIndexingMode": "string"
    },
    "thingIndexingConfiguration": {
        "customFields": [
            {
                "name": "string",
                "type": "string"
            }
        ],
        "managedFields": [
            {
                "name": "string",
                "type": "string"
            }
        ],
        "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. 521)`

Thing group indexing configuration.

Type: `ThingGroupIndexingConfiguration (p. 784)` object

Required: No
thingIndexingConfiguration (p. 521)

Thing indexing configuration.

Type: ThingIndexingConfiguration (p. 787) object

Required: No

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 429

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 524)**

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. 524)

Allows you to create criteria to abort a job.
Type: AbortConfig (p. 608) object
Required: No

description (p. 524)

A short text description of the job.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: $[^\p{C}\C]+$
Required: No

jobExecutionsRolloutConfig (p. 524)

Allows you to create a staged rollout of the job.
Type: JobExecutionsRolloutConfig (p. 696) object
Required: No

presignedUrlConfig (p. 524)

Configuration information for pre-signed S3 URLs.
Type: PresignedUrlConfig (p. 732) object
Required: No

timeoutConfig (p. 524)

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. 792) 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateMitigationAction

Service: AWS IoT

Updates the definition for the specified mitigation action.

Request Syntax

```
PATCH /mitigationactions/actions/actionName HTTP/1.1
Content-type: application/json

{
   "actionParams": {
      "addThingsToThingGroupParams": {
         "overrideDynamicGroups": boolean,
         "thingGroupNames": [ "string" ]
      },
      "enableIoTLoggingParams": {
         "logLevel": "string",
         "roleArnForLogging": "string"
      },
      "publishFindingToSnsParams": {
         "topicArn": "string"
      },
      "replaceDefaultPolicyVersionParams": {
         "templateName": "string"
      },
      "updateCACertificateParams": {
         "action": "string"
      },
      "updateDeviceCertificateParams": {
         "action": "string"
      }
   },
   "roleArn": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**actionName (p. 527)**

The friendly name for the mitigation action. You can't change the name by using UpdateMitigationAction. Instead, you must delete and re-create the mitigation action with the new name.

Length Constraints: Maximum length of 128.

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

**Request Body**

The request accepts the following data in JSON format.

**actionParams (p. 527)**

Defines the type of action and the parameters for that action.

Type: MitigationActionParams (p. 717) object
Required: No

**roleArn (p. 527)**

The ARN of the IAM role that is used to apply the mitigation action.

Type: String


Required: No

**Response Syntax**

HTTP/1.1 200
Content-type: application/json

```
{
  "actionArn": "string",
  "actionId": "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.

**actionArn (p. 528)**

The ARN for the new mitigation action.

Type: String

**actionId (p. 528)**

A unique identifier for the mitigation action.

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateProvisioningTemplate

Service: AWS IoT

Updates a fleet provisioning template.

Request Syntax

```
PATCH /provisioning-templates/templateName HTTP/1.1
Content-type: application/json

{
    "defaultVersionId": number,
    "description": "string",
    "enabled": boolean,
    "provisioningRoleArn": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

**templateName (p. 530)**

The name of the fleet provisioning template.


Pattern: `^[0-9A-Za-z_\-]+$`

Request Body

The request accepts the following data in JSON format.

**defaultVersionId (p. 530)**

The ID of the default provisioning template version.

Type: Integer

Required: No

**description (p. 530)**

The description of the fleet provisioning template.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

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

Required: No

**enabled (p. 530)**

True to enable the fleet provisioning template, otherwise false.

Type: Boolean

Required: No
provisioningRoleArn (p. 530)

The ARN of the role associated with the provisioning template. This IoT role grants permission to provision a device.

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

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

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

See Also

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

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

Service: AWS IoT

Updates a role alias.

Request Syntax

```plaintext
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. 533)**

The role alias to update.


Pattern: `[^\s,\-]+`

Request Body

The request accepts the following data in JSON format.

**credentialDurationSeconds (p. 533)**

The number of seconds the credential will be valid.

Type: Integer


Required: No

**roleArn (p. 533)**

The role ARN.

Type: String


Required: No

Response Syntax

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

```json
{
    "roleAlias": "string",
    "roleAliasArn": "string"
}
```

**Response Elements**

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

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

**roleAlias** (p. 533)

The role alias.

Type: String


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

**roleAliasArn** (p. 533)

The role alias ARN.

Type: String

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

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429

**UnauthorizedException**

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

See Also

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

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

Service: AWS IoT

Updates a scheduled audit, including which 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. 536)

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. 536)

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[0-9]|20-9\-\-)+$|^LAST$

Required: No
dayOfWeek (p. 536)

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. 536)**

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

- Type: String
- Valid Values: DAILY | WEEKLY | BIWEEKLY | MONTHLY
- Required: No

**targetCheckNames (p. 536)**

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 use UpdateAccountAuditConfiguration to select which checks are enabled.)

- Type: Array of strings
- Required: No

**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. 537)**

- 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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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" ],
    "additionalMetricsToRetainV2": [  
        {  
            "metric": "string",
            "metricDimension": {  
                "dimensionName": "string",
                "operator": "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",
            "metricDimension": {  
                "dimensionName": "string",
                "operator": "string"
            },
            "name": "string"
        }
    ],
    "deleteAdditionalMetricsToRetain": boolean,
    "deleteAlertTargets": boolean,
    "deleteBehaviors": boolean,
    "securityProfileDescription": "string"
}

URI Request Parameters

The request requires the following URI parameters.
expectedVersion (p. 539)

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 from the actual version, a VersionConflictException is thrown.

securityProfileName (p. 539)

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. 539)

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.

Note: This API field is deprecated. Please use UpdateSecurityProfile:additionalMetricsToRetainV2 (p. 540) instead.

Type: Array of strings
Required: No

additionalMetricsToRetainV2 (p. 539)

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 MetricToRetain (p. 713) objects
Required: No

alertTargets (p. 539)

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

Type: String to AlertTarget (p. 616) object map
Valid Keys: SNS
Required: No

behaviors (p. 539)

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

Type: Array of Behavior (p. 641) objects
Array Members: Maximum number of 100 items.
Required: No

deleteAdditionalMetricsToRetain (p. 539)

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. 539)

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. 539)

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. 539)

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" ],
  "additionalMetricsToRetainV2": [  
    {  
      "metric": "string",
      "metricDimension": {  
        "dimensionName": "string",
        "operator": "string"
      }
    }
  ],
  "alertTargets": {  
    "string": {  
      "alertTargetArn": "string",
      "roleArn": "string"
    }
  },
  "behaviors": [  
    {  
      "criteria": {  
        "comparisonOperator": "string",
        "consecutiveDatapointsToAlarm": number,
        "consecutiveDatapointsToClear": number,
        "durationSeconds": number,
        "statisticalThreshold": {  
          "statistic": "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.

**additionalMetricsToRetain (p. 541)**

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.

*Note:* This API field is deprecated. Please use `UpdateSecurityProfile:additionalMetricsToRetainV2 (p. 542)` instead.

Type: Array of strings

**additionalMetricsToRetainV2 (p. 541)**

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 MetricToRetain (p. 713) objects

**alertTargets (p. 541)**

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

Type: String to AlertTarget (p. 616) object map

Valid Keys: `SNS`

**behaviors (p. 541)**

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

Type: Array of Behavior (p. 641) objects

Array Members: Maximum number of 100 items.

**creationDate (p. 541)**

The time the security profile was created.
Type: Timestamp

**lastModifiedDate** *(p. 541)*

The time the security profile was last modified.

Type: Timestamp

**securityProfileArn** *(p. 541)*

The ARN of the security profile that was updated.

Type: String

**securityProfileDescription** *(p. 541)*

The description of the security profile.

Type: String

Length Constraints: Maximum length of 1000.

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

**securityProfileName** *(p. 541)*

The name of the security profile that was updated.

Type: String


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

**version** *(p. 541)*

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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**UpdateStream**

Service: AWS IoT

Updates an existing stream. The stream version will be incremented by one.

**Request Syntax**

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

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

**URI Request Parameters**

The request requires the following URI parameters.

**streamId (p. 545)**

The stream ID.


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

**Request Body**

The request accepts the following data in JSON format.

**description (p. 545)**

The description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

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

Required: No

**files (p. 545)**

The files associated with the stream.

Type: Array of StreamFile (p. 769) objects
Array Members: Minimum number of 1 item. Maximum number of 50 items.

Required: No

**roleArn (p. 545)**

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. 546)**

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

**streamArn (p. 546)**

The stream ARN.

Type: String

**streamId (p. 546)**

The stream ID.

Type: String


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

**streamVersion (p. 546)**

The stream version.

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

Errors

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

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

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

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

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

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

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateThing
Service: AWS IoT
Updates the data for a thing.

Request Syntax

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

{
   "attributePayload": {
      "attributes": {
         "String": "String"
      },
      "merge": boolean
   },
   "expectedVersion": number,
   "removeThingType": boolean,
   "thingTypeName": "String"
}

URI Request Parameters

The request requires the following URI parameters.

thingName (p. 548)
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. 548)
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. 621) object
Required: No

expectedVersion (p. 548)
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. 548)**

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

- **Type**: Boolean
- **Required**: No

**thingTypeName (p. 548)**

The name of the thing type.

- **Type**: String
- **Length Constraints**: Minimum length of 1. Maximum length of 128.
- **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 Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateThingGroup
Service: AWS IoT

Update a thing group.

Request Syntax

PATCH /thing-groups/{thingGroupName} HTTP/1.1
Content-type: application/json

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

URI Request Parameters

The request requires the following URI parameters.

thingGroupName (p. 551)

The thing group to update.


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

Request Body

The request accepts the following data in JSON format.

expectedVersion (p. 551)

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. 551)

The thing group properties.

Type: ThingGroupProperties (p. 786) 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. 551)

   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 Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 554)**

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. 554)**

The groups to which the thing will be added.

- **Type:** Array of strings
- **Length Constraints:** Minimum length of 1. Maximum length of 128.
- **Pattern:** `[a-zA-Z0-9_:\-]+`
- **Required:** No

**thingGroupsToRemove (p. 554)**

The groups from which the thing will be removed.

- **Type:** Array of strings
- **Length Constraints:** Minimum length of 1. Maximum length of 128.
- **Pattern:** `[a-zA-Z0-9_:\-]+`
- **Required:** No

**thingName (p. 554)**

The thing whose group memberships will be updated.
Type: String


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

Required: No

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

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

**Errors**

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

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

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

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

**See Also**

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

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

Updates a topic rule destination. You use this to change the status, endpoint URL, or confirmation URL of the destination.

Request Syntax

```json
PATCH /destinations HTTP/1.1
Content-type: application/json
{
   "arn": "string",
   "status": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**arn (p. 557)**

The ARN of the topic rule destination.

Type: String

Required: Yes

**status (p. 557)**

The status of the topic rule destination. Valid values are:

IN_PROGRESS

A topic rule destination was created but has not been confirmed. You can set status to IN_PROGRESS by calling UpdateTopicRuleDestination. Calling UpdateTopicRuleDestination causes a new confirmation challenge to be sent to your confirmation endpoint.

ENABLED

Confirmation was completed, and traffic to this destination is allowed. You can set status to DISABLED by calling UpdateTopicRuleDestination.

DISABLED

Confirmation was completed, and traffic to this destination is not allowed. You can set status to ENABLED by calling UpdateTopicRuleDestination.

ERROR

Confirmation could not be completed, for example if the confirmation timed out. You can call GetTopicRuleDestination for details about the error. You can set status to IN_PROGRESS by calling UpdateTopicRuleDestination. Calling UpdateTopicRuleDestination causes a new confirmation challenge to be sent to your confirmation endpoint.

Type: String
Valid Values: ENABLED | IN_PROGRESS | DISABLED | ERROR

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

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

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

Service: AWS IoT

 Validates a Device Defender security profile behaviors specification.

**Request Syntax**

```plaintext
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",
      "metricDimension": {
        "dimensionName": "string",
        "operator": "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. 560)**

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

Type: Array of **Behavior (p. 641)** objects

Array Members: Maximum number of 100 items.

Required: Yes

**Response Syntax**

```
HTTP/1.1 200
```
Response Elements

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. 560)

True if the behaviors were valid.

Type: Boolean

validationErrors (p. 560)

The list of any errors found in the behaviors.

Type: Array of ValidationError (p. 807) 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 Java
- AWS SDK for JavaScript
AWS IoT Data Plane

The following actions are supported by AWS IoT Data Plane:

- `DeleteThingShadow` (p. 563)
- `GetThingShadow` (p. 565)
- `Publish` (p. 567)
- `UpdateThingShadow` (p. 569)
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. 563)
   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. 563)
   The state information, in JSON format.

Errors

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

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

The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405
**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404
**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 429
**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401
**UnsupportedDocumentEncodingException**

The document encoding is not supported.

HTTP Status Code: 415

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 565)**

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. 565)**

The state information, in JSON format.

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.
HTTP Status Code: 400
**MethodNotAllowedException**
The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405
**ResourceNotFoundException**
The specified resource does not exist.

HTTP Status Code: 404
**ServiceUnavailableException**
The service is temporarily unavailable.

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

HTTP Status Code: 429
**UnauthorizedException**
You are not authorized to perform this operation.

HTTP Status Code: 401
**UnsupportedDocumentEncodingException**
The document encoding is not supported.

HTTP Status Code: 415

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

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

Service: AWS IoT Data Plane

Publishes state information.

For more information, see [HTTP Protocol](https://docs.aws.amazon.com/iot/latest/developerguide/http-protocol.html) in the AWS IoT Developer Guide.

### Request Syntax

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

### URI Request Parameters

The request requires the following URI parameters.

- **qos (p. 567)**
  - The Quality of Service (QoS) level.
  - Valid Range: Minimum value of 0. Maximum value of 1.

- **topic (p. 567)**
  - The name of the MQTT topic.

### Request Body

The request accepts the following binary data.

- **payload (p. 567)**
  - The state information, in JSON format.

### Response Syntax

```
HTTP/1.1 200
```

### Response Elements

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

### Errors

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

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

**MethodNotAllowedException**

The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405

**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 401

**See Also**

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
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. 569)*

The name of the thing.


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

**Request Body**

The request accepts the following binary data.

*payload (p. 569)*

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. 569)*

The state information, in JSON format.

**Errors**

*ConflictException*

The specified version does not match the version of the document.
HTTP Status Code: 409
**InternalFailureException**
An unexpected error has occurred.

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

HTTP Status Code: 400
**MethodNotAllowedException**
The specified combination of HTTP verb and URI is not supported.

HTTP Status Code: 405
**RequestEntityTooLargeException**
The payload exceeds the maximum size allowed.

HTTP Status Code: 413
**ServiceUnavailableException**
The service is temporarily unavailable.

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

HTTP Status Code: 429
**UnauthorizedException**
You are not authorized to perform this operation.

HTTP Status Code: 401
**UnsupportedDocumentEncodingException**
The document encoding is not supported.

HTTP Status Code: 415

---

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
The following actions are supported by AWS IoT Jobs Data Plane:

- DescribeJobExecution (p. 572)
- GetPendingJobExecutions (p. 575)
- StartNextPendingJobExecution (p. 578)
- UpdateJobExecution (p. 581)
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. 572)
Optional. A number that identifies a particular job execution on a particular device. If not specified, the latest job execution is returned.

includeJobDocument (p. 572)
Optional. Unless set to false, the response contains the job document. The default is true.

jobId (p. 572)
The unique identifier assigned to this job when it was created.

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

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

tingName (p. 572)
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"
},
"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. 572)**

Contains data about a job execution.

Type: JobExecution (p. 810) 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: 400

See Also

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

- AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
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. 575)

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. 575)**

A list of JobExecutionSummary objects with status IN_PROGRESS.

Type: Array of JobExecutionSummary (p. 814) objects

**queuedJobs (p. 575)**

A list of JobExecutionSummary objects with status QUEUED.

Type: Array of JobExecutionSummary (p. 814) 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: 400

**See Also**

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

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

```plaintext
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. 578)**

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. 578)**

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. 578)**

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. 579)**

A JobExecution object.

Type: JobExecution (p. 810) 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: 400

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateJobExecution
Service: AWS IoT Jobs Data Plane

Updates the status of a job execution.

Request Syntax

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

{
   "executionNumber": number,
   "expectedVersion": number,
   "includeJobDocument": boolean,
   "includeJobExecutionState": boolean,
   "status": "string",
   "statusDetails": {
      "string" : "string"
   },
   "stepTimeoutInMinutes": number
}

URI Request Parameters

The request requires the following URI parameters.

jobId (p. 581)

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. 581)

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. 581)

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

Type: Long

Required: No

expectedVersion (p. 581)

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. 581)**

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

Type: Boolean
Required: No

**includeJobExecutionState (p. 581)**

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

Type: Boolean
Required: No

**status (p. 581)**

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. 581)**

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. 581)**

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).
Type: Long  
Required: No

Response Syntax

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

Response Elements

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

**executionState (p. 583)**

A JobExecutionState object.

Type: JobExecutionState (p. 813) object

**jobDocument (p. 583)**

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: 400

**See Also**

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

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

**AWS IoT Secure Tunneling**

The following actions are supported by AWS IoT Secure Tunneling:

- **CloseTunnel** (p. 585)
- **DescribeTunnel** (p. 587)
- **ListTagsForResource** (p. 589)
- **ListTunnels** (p. 591)
- **OpenTunnel** (p. 593)
- **TagResource** (p. 596)
- **UntagResource** (p. 598)
CloseTunnel

Service: AWS IoT Secure Tunneling

Closes a tunnel identified by the unique tunnel id. When a CloseTunnel request is received, we close the WebSocket connections between the client and proxy server so no data can be transmitted.

Request Syntax

```
{
  "delete": boolean,
  "tunnelId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 824).

The request accepts the following data in JSON format.

delete (p. 585)

When set to true, AWS IoT Secure Tunneling deletes the tunnel data immediately.

Type: Boolean

Required: No

tunnelId (p. 585)

The ID of the tunnel to close.

Type: String

Pattern: `[a-zA-Z0-9_\-+=:]\{1,128\}`

Required: Yes

Response Elements

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

Errors

ResourceNotFoundException

Thrown when an operation is attempted on a resource that does not exist.

HTTP Status Code: 400

See Also

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

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

Gets information about a tunnel identified by the unique tunnel id.

Request Syntax

```
{
   "tunnelId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 824).

The request accepts the following data in JSON format.

**tunnelId (p. 587)**

The tunnel to describe.

Type: String

Pattern: [a-zA-Z0-9_\-+=:]{1,128}

Required: Yes

Response Syntax

```
{
   "tunnel": {
      "createdAt": number,
      "description": "string",
      "destinationConfig": {
         "services": [ "string" ],
         "thingName": "string"
      },
      "destinationConnectionState": {
         "lastUpdatedAt": number,
         "status": "string"
      },
      "lastUpdatedAt": number,
      "sourceConnectionState": {
         "lastUpdatedAt": number,
         "status": "string"
      },
      "status": "string",
      "tags": [
         {
            "key": "string",
            "value": "string"
         }
      ],
      "timeoutConfig": {
         "maxLifetimeTimeoutMinutes": number
      },
      "tunnelArn": "string",
   }
}
```

587
"tunnelId": "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.

tunnel (p. 587)

The tunnel being described.
Type: Tunnel (p. 820) object

Errors

ResourceNotFoundException

Thrown when an operation is attempted on a resource that does not exist.

HTTP Status Code: 400

See Also

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

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

Service: AWS IoT Secure Tunneling

Lists the tags for the specified resource.

Request Syntax

```json
{
  "resourceArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 824).

The request accepts the following data in JSON format.

**resourceArn (p. 589)**

The resource ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

Response Syntax

```json
{
  "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.

**tags (p. 589)**

The tags for the specified resource.

Type: Array of Tag (p. 818) objects

Array Members: Minimum number of 1 item. Maximum number of 200 items.
Errors

ResourceNotFoundException

Thrown when an operation is attempted on a resource that does not exist.

HTTP Status Code: 400

See Also

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

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

List all tunnels for an AWS account. Tunnels are listed by creation time in descending order, newer tunnels will be listed before older tunnels.

Request Syntax

{  
  "maxResults": number,
  "nextToken": "string",
  "thingName": "string"
}

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 824).

The request accepts the following data in JSON format.

maxResults (p. 591)

  The maximum number of results to return at once.

  Type: Integer

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

  Required: No

nextToken (p. 591)

  A token to retrieve the next set of results.

  Type: String

  Pattern: [a-zA-Z0-9-_]=\{1,4096\}

  Required: No

thingName (p. 591)

  The name of the IoT thing associated with the destination device.

  Type: String


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

  Required: No

Response Syntax

{  
  "nextToken": "string",
  "tunnelSummaries": [  
  }
```json
{
    "createdAt": number,
    "description": "string",
    "lastUpdatedAt": number,
    "status": "string",
    "tunnelArn": "string",
    "tunnelId": "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. 591)**

A token to used to retrieve the next set of results.

Type: String

Pattern: [a-zA-Z0-9_=-]{1,4096}

**tunnelSummaries (p. 591)**

A short description of the tunnels in an AWS account.

Type: Array of TunnelSummary (p. 822) objects

**See Also**

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

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

Creates a new tunnel, and returns two client access tokens for clients to use to connect to the AWS IoT Secure Tunneling proxy server.

Request Syntax

```json
{
    "description": "string",
    "destinationConfig": {
        "services": [ "string" ],
        "thingName": "string"
    },
    "tags": [
        {
            "key": "string",
            "value": "string"
        }
    ],
    "timeoutConfig": {
        "maxLifetimeTimeoutMinutes": number
    }
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 824).

The request accepts the following data in JSON format.

description (p. 593)

A short text description of the tunnel.

Type: String

Pattern: [^\p{C}]{1,2048}

Required: No
destinationConfig (p. 593)

The destination configuration for the OpenTunnel request.

Type: DestinationConfig (p. 817) object

Required: No
tags (p. 593)

A collection of tag metadata.

Type: Array of Tag (p. 818) objects

Array Members: Minimum number of 1 item. Maximum number of 200 items.

Required: No
timeoutConfig (p. 593)

Timeout configuration for a tunnel.
Type: TimeoutConfig (p. 819) object

Required: No

Response Syntax

```
{
  "destinationAccessToken": "string",
  "sourceAccessToken": "string",
  "tunnelArn": "string",
  "tunnelId": "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.

**destinationAccessToken (p. 594)**

The access token the destination local proxy uses to connect to AWS IoT Secure Tunneling.

Type: String

**sourceAccessToken (p. 594)**

The access token the source local proxy uses to connect to AWS IoT Secure Tunneling.

Type: String

**tunnelArn (p. 594)**

The Amazon Resource Name for the tunnel. The tunnel ARN format is

```
arn:aws:tunnel:<region>:<account-id>:tunnel/<tunnel-id>
```

Type: String


**tunnelId (p. 594)**

A unique alpha-numeric tunnel ID.

Type: String

Pattern: [a-zA-Z0-9-_\+=:]{1,128}

Errors

**LimitExceededException**

Thrown when a tunnel limit is exceeded.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
TagResource
Service: AWS IoT Secure Tunneling

A resource tag.

Request Syntax

```
{
  "resourceArn": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 824).

The request accepts the following data in JSON format.

resourceArn (p. 596)

  The ARN of the resource.

  Type: String

  Length Constraints: Minimum length of 1. Maximum length of 1011.

  Required: Yes

tags (p. 596)

  The tags for the resource.

  Type: Array of Tag (p. 818) objects

  Array Members: Minimum number of 1 item. Maximum number of 200 items.

  Required: Yes

Response Elements

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

Errors

ResourceNotFoundException

  Thrown when an operation is attempted on a resource that does not exist.

  HTTP Status Code: 400
See Also

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

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

Service: AWS IoT Secure Tunneling

Removes a tag from a resource.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 824).

The request accepts the following data in JSON format.

resourceArn (p. 598)

The resource ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

tagKeys (p. 598)

The keys of the tags to remove.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 200 items.


Pattern: ^([\p{L}\p{Z}\p{N}_\p{P}\p{Z}\.\/:=+\-@])$ #

Required: Yes

Response Elements

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

Errors

ResourceNotFoundException

Thrown when an operation is attempted on a resource that does not exist.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
Data Types

The following data types are supported by AWS IoT:

- AbortConfig (p. 608)
- AbortCriteria (p. 609)
- Action (p. 610)
- ActiveViolation (p. 613)
- AddThingsToThingGroupParams (p. 615)
- AlertTarget (p. 616)
- Allowed (p. 617)
- AssetPropertyTimestamp (p. 618)
- AssetPropertyValue (p. 619)
- AssetPropertyVariant (p. 620)
- AttributePayload (p. 621)
- AuditCheckConfiguration (p. 622)
- AuditCheckDetails (p. 623)
- AuditFinding (p. 625)
- AuditMitigationActionExecutionMetadata (p. 627)
- AuditMitigationActionsTaskMetadata (p. 629)
- AuditMitigationActionsTaskTarget (p. 630)
- AuditNotificationTarget (p. 631)
- AuditTaskMetadata (p. 632)
- AuthInfo (p. 633)
- AuthorizerConfig (p. 634)
- AuthorizerDescription (p. 635)
- AuthorizerSummary (p. 637)
- AuthResult (p. 638)
- AwsJobExecutionsRolloutConfig (p. 639)
- AwsJobPresignedUrlConfig (p. 640)
- Behavior (p. 641)
- BehaviorCriteria (p. 642)
- BillingGroupMetadata (p. 644)
- BillingGroupProperties (p. 645)
- CACertificate (p. 646)
- CACertificateDescription (p. 647)
- Certificate (p. 649)
- CertificateDescription (p. 650)
- CertificateValidity (p. 653)
- CloudwatchAlarmAction (p. 654)
- CloudwatchLogsAction (p. 655)
- CloudwatchMetricAction (p. 656)
- CodeSigning (p. 658)
• CodeSigningCertificateChain (p. 659)
• CodeSigningSignature (p. 660)
• Configuration (p. 661)
• CustomCodeSigning (p. 662)
• Denied (p. 663)
• Destination (p. 664)
• DomainConfigurationSummary (p. 665)
• DynamoDBAction (p. 666)
• DynamoDBv2Action (p. 668)
• EffectivePolicy (p. 669)
• ElasticsearchAction (p. 670)
• EnableIoTLoggingParams (p. 671)
• ErrorInfo (p. 672)
• ExplicitDeny (p. 673)
• ExponentialRolloutRate (p. 674)
• Field (p. 675)
• FileLocation (p. 676)
• FirehoseAction (p. 677)
• GroupNameAndArn (p. 678)
• HttpAction (p. 679)
• HttpActionHeader (p. 681)
• HttpAuthorization (p. 682)
• HttpContext (p. 683)
• HttpUrlDestinationConfiguration (p. 684)
• HttpUrlDestinationProperties (p. 685)
• HttpUrlDestinationSummary (p. 686)
• ImplicitDeny (p. 687)
• IotAnalyticsAction (p. 688)
• IotEventsAction (p. 689)
• IotSiteWiseAction (p. 690)
• Job (p. 691)
• JobExecution (p. 694)
• JobExecutionsRolloutConfig (p. 696)
• JobExecutionStatusDetails (p. 697)
• JobExecutionSummary (p. 698)
• JobExecutionSummaryForJob (p. 700)
• JobExecutionSummaryForThing (p. 701)
• JobProcessDetails (p. 702)
• JobSummary (p. 704)
• KeyPair (p. 706)
• KinesisAction (p. 707)
• LambdaAction (p. 708)
• LoggingOptionsPayload (p. 709)
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• LogTargetConfiguration (p. 711)
• MetricDimension (p. 712)
• MetricToRetain (p. 713)
• MetricValue (p. 714)
• MitigationAction (p. 715)
• MitigationActionIdentifier (p. 716)
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• OTAUpdateSummary (p. 725)
• OutgoingCertificate (p. 726)
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• Policy (p. 729)
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• PolicyVersionIdentifier (p. 731)
• PresignedUrlConfig (p. 732)
• ProvisioningTemplateSummary (p. 733)
• ProvisioningTemplateVersionSummary (p. 735)
• PublishFindingToSnsParams (p. 736)
• PutAssetPropertyValueEntry (p. 737)
• PutItemInput (p. 739)
• RateIncreaseCriteria (p. 740)
• RegistrationConfig (p. 741)
• RelatedResource (p. 742)
• ReplaceDefaultPolicyVersionParams (p. 743)
• RepublishAction (p. 744)
• ResourceIdentifier (p. 745)
• RoleAliasDescription (p. 747)
• S3Action (p. 749)
• S3Destination (p. 750)
• S3Location (p. 751)
• SalesforceAction (p. 752)
• ScheduledAuditMetadata (p. 753)
• SecurityProfileIdentifier (p. 755)
• SecurityProfileTarget (p. 756)
• SecurityProfileTargetMapping (p. 757)
• ServerCertificateSummary (p. 758)
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• SigV4Authorization (p. 760)
• SnsAction (p. 761)
• SqsAction (p. 762)
• StartSigningJobParameter (p. 763)
• StatisticalThreshold (p. 764)
• Statistics (p. 765)
• StepFunctionsAction (p. 767)
• Stream (p. 768)
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 Secure Tunneling:
AWS IoT

The following data types are supported by AWS IoT:

- `AbortConfig` (p. 608)
- `AbortCriteria` (p. 609)
- `Action` (p. 610)
- `ActiveViolation` (p. 613)
- `AddThingsToThingGroupParams` (p. 615)
- `AlertTarget` (p. 616)
- `Allowed` (p. 617)
- `AssetPropertyTimestamp` (p. 618)
- `AssetPropertyValue` (p. 619)
- `AssetPropertyVariant` (p. 620)
- `AttributePayload` (p. 621)
- `AuditCheckConfiguration` (p. 622)
- `AuditCheckDetails` (p. 623)
- `AuditFinding` (p. 625)
- `AuditMitigationActionExecutionMetadata` (p. 627)
- `AuditMitigationActionsTaskMetadata` (p. 629)
- `AuditMitigationActionsTaskTarget` (p. 630)
- `AuditNotificationTarget` (p. 631)
- `AuditTaskMetadata` (p. 632)
- `AuthInfo` (p. 633)
- `AuthorizerConfig` (p. 634)
- `AuthorizerDescription` (p. 635)
- `AuthorizerSummary` (p. 637)
- `AuthResult` (p. 638)
- `AwsJobExecutionsRolloutConfig` (p. 639)
- `AwsJobPresignedUrlConfig` (p. 640)
- `Behavior` (p. 641)
- `BehaviorCriteria` (p. 642)
- `BillingGroupMetadata` (p. 644)
- `BillingGroupProperties` (p. 645)
- `CACertificate` (p. 646)
- `CACertificateDescription` (p. 647)
- `Certificate` (p. 649)
- `CertificateDescription` (p. 650)
- `CertificateValidity` (p. 653)
- `CloudwatchAlarmAction` (p. 654)
- `CloudwatchLogsAction` (p. 655)
- `CloudwatchMetricAction` (p. 656)
- `CodeSigning` (p. 658)
- `CodeSigningCertificateChain` (p. 659)
- `CodeSigningSignature` (p. 660)
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- Destination (p. 664)
- DomainConfigurationSummary (p. 665)
- DynamoDBAction (p. 666)
- DynamoDBv2Action (p. 668)
- EffectivePolicy (p. 669)
- ElasticsearchAction (p. 670)
- EnableIoTLoggingParams (p. 671)
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- GroupNameAndArn (p. 678)
- HttpAction (p. 679)
- HttpActionHeader (p. 681)
- HttpAuthorization (p. 682)
- HttpContext (p. 683)
- HttpUrlDestinationConfiguration (p. 684)
- HttpUrlDestinationProperties (p. 685)
- HttpUrlDestinationSummary (p. 686)
- ImplicitDeny (p. 687)
- IotAnalyticsAction (p. 688)
- IotEventsAction (p. 689)
- IotSiteWiseAction (p. 690)
- Job (p. 691)
- JobExecution (p. 694)
- JobExecutionsRolloutConfig (p. 696)
- JobExecutionStatusDetails (p. 697)
- JobExecutionSummary (p. 698)
- JobExecutionSummaryForJob (p. 700)
- JobExecutionSummaryForThing (p. 701)
- JobProcessDetails (p. 702)
- JobSummary (p. 704)
- KeyPair (p. 706)
- KinesisAction (p. 707)
- LambdaAction (p. 708)
- LoggingOptionsPayload (p. 709)
- LogTarget (p. 710)
- LogTargetConfiguration (p. 711)
- MetricDimension (p. 712)
- MetricToRetain (p. 713)
- MetricValue (p. 714)
- MitigationAction (p. 715)
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• MitigationActionParams (p. 717)
• MqttContext (p. 719)
• NonCompliantResource (p. 720)
• OTAUpdateFile (p. 721)
• OTAUpdateInfo (p. 722)
• OTAUpdateSummary (p. 725)
• OutgoingCertificate (p. 726)
• PercentPair (p. 728)
• Policy (p. 729)
• PolicyVersion (p. 730)
• PolicyVersionIdentifier (p. 731)
• PresignedUrlConfig (p. 732)
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• ProvisioningTemplateVersionSummary (p. 735)
• PublishFindingToSnsParams (p. 736)
• PutAssetPropertyValueEntry (p. 737)
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• RateIncreaseCriteria (p. 740)
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• RelatedResource (p. 742)
• ReplaceDefaultPolicyVersionParams (p. 743)
• RepublishAction (p. 744)
• ResourceIdentifier (p. 745)
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• S3Action (p. 749)
• S3Destination (p. 750)
• S3Location (p. 751)
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• SecurityProfileTargetMapping (p. 757)
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- Tag (p. 773)
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- ThingAttribute (p. 777)
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- ThingDocument (p. 780)
- ThingGroupDocument (p. 782)
- ThingGroupIndexingConfiguration (p. 784)
- ThingGroupMetadata (p. 785)
- ThingGroupProperties (p. 786)
- ThingIndexingConfiguration (p. 787)
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- ThingTypeMetadata (p. 790)
- ThingTypeProperties (p. 791)
- TimeoutConfig (p. 792)
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- TopicRule (p. 794)
- TopicRuleDestination (p. 796)
- TopicRuleDestinationConfiguration (p. 798)
- TopicRuleDestinationSummary (p. 799)
- TopicRuleListItem (p. 801)
- TopicRulePayload (p. 802)
- TransferData (p. 804)
- UpdateCACertificateParams (p. 805)
- UpdateDeviceCertificateParams (p. 806)
- ValidationError (p. 807)
- ViolationEvent (p. 808)
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. 609) 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 Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
Action
Service: AWS IoT

Describes the actions associated with a rule.

Contents

cloudwatchAlarm
Change the state of a CloudWatch alarm.
Type: CloudwatchAlarmAction (p. 654) object
Required: No

cloudwatchLogs
Send data to CloudWatch Logs.
Type: CloudwatchLogsAction (p. 655) object
Required: No

cloudwatchMetric
Capture a CloudWatch metric.
Type: CloudwatchMetricAction (p. 656) object
Required: No

dynamoDB
Write to a DynamoDB table.
Type: DynamoDBAction (p. 666) 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. 668) object
Required: No

elasticsearch
Write data to an Amazon Elasticsearch Service domain.
Type: ElasticsearchAction (p. 670) object
Required: No

firehose
Write to an Amazon Kinesis Firehose stream.
Type: FirehoseAction (p. 677) object
Required: No
### http
Send data to an HTTPS endpoint.
Type: `HttpAction (p. 679)` object
Required: No

### iotAnalytics
Sends message data to an AWS IoT Analytics channel.
Type: `IotAnalyticsAction (p. 688)` object
Required: No

### iotEvents
Sends an input to an AWS IoT Events detector.
Type: `IotEventsAction (p. 689)` object
Required: No

### iotSiteWise
Sends data from the MQTT message that triggered the rule to AWS IoT SiteWise asset properties.
Type: `IotSiteWiseAction (p. 690)` object
Required: No

### kinesis
Write data to an Amazon Kinesis stream.
Type: `KinesisAction (p. 707)` object
Required: No

### lambda
Invoke a Lambda function.
Type: `LambdaAction (p. 708)` object
Required: No

### republish
Publish to another MQTT topic.
Type: `RepublishAction (p. 744)` object
Required: No

### s3
Write to an Amazon S3 bucket.
Type: `S3Action (p. 749)` object
Required: No

### salesforce
Send a message to a Salesforce IoT Cloud Input Stream.
Type: SalesforceAction (p. 752) object
Required: No

sns
Publish to an Amazon SNS topic.
Type: SnsAction (p. 761) object
Required: No

sqs
Publish to an Amazon SQS queue.
Type: SqsAction (p. 762) object
Required: No

stepFunctions
Starts execution of a Step Functions state machine.
Type: StepFunctionsAction (p. 767) object
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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. 641) 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. 714) 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


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 Java
- AWS SDK for Ruby V3
AddThingsToThingGroupParams

Parameters used when defining a mitigation action that move a set of things to a thing group.

**Contents**

**overrideDynamicGroups**

Specifies if this mitigation action can move the things that triggered the mitigation action even if they are part of one or more dynamic things groups.

Type: Boolean

Required: No

**thingGroupNames**

The list of groups to which you want to add the things that triggered the mitigation action. You can add a thing to a maximum of 10 groups, but you cannot add a thing to more than one group in the same hierarchy.

Type: Array of strings

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


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 Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
**Allowed**

*Service: AWS IoT*

Contains information that allowed the authorization.

**Contents**

**policies**

A list of policies that allowed the authentication.

*Type: Array of [Policy](#) objects*

*Required: No*

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
AssetPropertyTimestamp

Service: AWS IoT

An asset property timestamp entry containing the following information.

Contents

offsetInNanos
  Optional. A string that contains the nanosecond time offset. Accepts substitution templates.
  Type: String
  Required: No

timeInSeconds
  A string that contains the time in seconds since epoch. Accepts substitution templates.
  Type: String
  Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
AssetPropertyValue
Service: AWS IoT

An asset property value entry containing the following information.

Contents

quality
Optional. A string that describes the quality of the value. Accepts substitution templates. Must be GOOD, BAD, or UNCERTAIN.

Type: String
Required: No

timestamp
The asset property value timestamp.

Type: AssetPropertyTimestamp (p. 618) object
Required: Yes

value
The value of the asset property.

Type: AssetPropertyVariant (p. 620) 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 Java
- AWS SDK for Ruby V3
AssetPropertyVariant

Service: AWS IoT

Contains an asset property value (of a single type).

Contents

booleanValue

Optional. A string that contains the boolean value (true or false) of the value entry. Accepts substitution templates.

Type: String
Required: No

doubleValue

Optional. A string that contains the double value of the value entry. Accepts substitution templates.

Type: String
Required: No

integerValue

Optional. A string that contains the integer value of the value entry. Accepts substitution templates.

Type: String
Required: No

stringValue

Optional. The string value of the value entry. Accepts substitution templates.

Type: String


Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
AttributePayload

Service: AWS IoT

The attribute payload.

Contents

attributes

A JSON string containing up to three key-value pair in JSON format. For example:

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

Type: String to string map

Key Length Constraints: Maximum length of 128.

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

Value Length Constraints: Maximum length of 800.

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

Required: No

merge

Specifies whether the list of attributes provided in the AttributePayload is merged with the attributes stored in the registry, instead of overwriting them.

To remove an attribute, call UpdateThing with an empty attribute value.

**Note**

The merge attribute is only valid when calling UpdateThing or UpdateThingGroup.

Type: Boolean

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
AuditCheckConfiguration
Service: AWS IoT

Which audit checks are enabled and disabled for this account.

Contents

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 Java
- AWS SDK for Ruby V3
AuditCheckDetails

Service: AWS IoT

Information about the audit check.

Contents

checkCompliant

True if the check is complete 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 this check is performed during this audit. One of "INSUFFICIENT_PERMISSIONS" or "AUDIT_CHECK_DISABLED".

Type: String

Required: No

message

The message associated with any error encountered when this check is performed during this audit.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

nonCompliantResourcesCount

The number of resources that were found noncompliant during the check.

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 Java
- AWS SDK for Ruby V3
AuditFinding

Service: AWS IoT

The findings (results) of the audit.

Contents

checkName

The audit check that generated this result.

Type: String

Required: No

findingId

A unique identifier for this set of audit findings. This identifier is used to apply mitigation tasks to one or more sets of findings.

Type: String


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

Required: No

findingTime

The time the result (finding) was discovered.

Type: Timestamp

Required: No

nonCompliantResource

The resource that was found to be noncompliant with the audit check.

Type: NonCompliantResource (p. 720) object

Required: No

reasonForNonCompliance

The reason the resource was noncompliant.

Type: String

Required: No

reasonForNonComplianceCode

A code that indicates the reason that the resource was noncompliant.

Type: String

Required: No

relatedResources

The list of related resources.

Type: Array of RelatedResource (p. 742) 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 Java
- AWS SDK for Ruby V3
AuditMitigationActionExecutionMetadata

Service: AWS IoT

Returned by ListAuditMitigationActionsTask, this object contains information that describes a mitigation action that has been started.

Contents

actionId

The unique identifier for the mitigation action being applied by the task.

Type: String

Required: No

actionName

The friendly name of the mitigation action being applied by the task.

Type: String

Length Constraints: Maximum length of 128.

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

Required: No

endTime

The date and time when the task was completed or canceled. Blank if the task is still running.

Type: Timestamp

Required: No

errorCode

If an error occurred, the code that indicates which type of error occurred.

Type: String

Required: No

findingId

The unique identifier for the findings to which the task and associated mitigation action are applied.

Type: String


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

Required: No

message

If an error occurred, a message that describes the error.

Type: String

Length Constraints: Maximum length of 2048.
Required: No

**startTime**

The date and time when the task was started.

Type: Timestamp

Required: No

**status**

The current status of the task being executed.

Type: String

Valid Values: \(\text{IN\_PROGRESS} \mid \text{COMPLETED} \mid \text{FAILED} \mid \text{CANCELED} \mid \text{SKIPPED} \mid \text{PENDING}\)

Required: No

**taskId**

The unique identifier for the task that applies the mitigation action.

Type: String


Pattern: \([a-zA-Z0-9_-]*\)

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
AuditMitigationActionsTaskMetadata

Service: AWS IoT

Information about an audit mitigation actions task that is returned by ListAuditMitigationActionsTasks.

Contents

startTime

The time at which the audit mitigation actions task was started.

Type: Timestamp

Required: No

taskId

The unique identifier for the task.

Type: String


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

Required: No

taskStatus

The current state of the audit mitigation actions task.

Type: String

Valid Values: IN_PROGRESS | COMPLETED | FAILED | CANCELED

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
AuditMitigationActionsTaskTarget

Service: AWS IoT

Used in MitigationActionParams, this information identifies the target findings to which the mitigation actions are applied. Only one entry appears.

Contents

auditCheckToReasonCodeFilter

Specifies a filter in the form of an audit check and set of reason codes that identify the findings from the audit to which the audit mitigation actions task apply.

Type: String to array of strings map

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: No

auditTaskId

If the task will apply a mitigation action to findings from a specific audit, this value uniquely identifies the audit.

Type: String


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

Required: No

findingIds

If the task will apply a mitigation action to one or more listed findings, this value uniquely identifies those findings.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.


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

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
AuthInfo
Service: AWS IoT

A collection of authorization information.

Contents

actionType
The type of action for which the principal is being authorized.
Type: String
Valid Values: PUBLISH | SUBSCRIBE | RECEIVE | CONNECT
Required: No

resources
The resources for which the principal is being authorized to perform the specified action.
Type: Array of strings
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
AuthorizerConfig

Service: AWS IoT

An object that specifies the authorization service for a domain.

Contents

allowAuthorizerOverride

A Boolean that specifies whether the domain configuration's authorization service can be overridden.

Type: Boolean

Required: No

defaultAuthorizerName

The name of the authorization service for a domain configuration.

Type: String


Pattern: [\w=, @-]+

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
AuthorizerDescription
Service: AWS IoT
The authorizer description.

Contents
authorizerArn
The authorizer ARN.
Type: String
Required: No
authorFunctionArn
The authorizer's Lambda function ARN.
Type: String
Required: No
authorName
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
signingDisabled
Specifies whether AWS IoT validates the token signature in an authorization request.
Type: Boolean
Required: No
status
The status of the authorizer.
Type: String
Valid Values: ACTIVE | INACTIVE
Required: No

**tokenKeyName**

The key used to extract the token from the HTTP headers.
Type: String
Pattern: \[a-zA-Z0-9_\-]+\+
Required: No

**tokenSigningPublicKeys**

The public keys used to validate the token signature returned by your custom authentication service.
Type: String to string map
Key Length Constraints: Minimum length of 1. Maximum length of 128.
Key Pattern: \[a-zA-Z0-9_:\-]+\+
Value Length Constraints: Maximum length of 5120.
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
AuthorizerSummary
Service: AWS IoT

The authorizer summary.

Contents

authorizerArn

The authorizer ARN.

Type: String

Required: No

authorizerName

The authorizer name.

Type: String


Pattern: [\w=, @ - ]+

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
AuthResult
Service: AWS IoT
The authorizer result.

Contents

allowed
The policies and statements that allowed the specified action.
Type: Allowed (p. 617) 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. 633) object
Required: No

denied
The policies and statements that denied the specified action.
Type: Denied (p. 663) object
Required: No

missingContextValues
Contains any missing context values found while evaluating policy.
Type: Array of strings
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
AwsJobPresignedUrlConfig

Service: AWS IoT

Configuration information for pre-signed URLs. Valid when protocol contains HTTP.

Contents

decrypt

How long (in seconds) pre-signed URLs are valid. Valid values are 60 - 3600, the default value is 1800 seconds. Pre-signed URLs are generated when a request for the job document is received.

Type: Long

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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. 642) object

Required: No

metric
What is measured by the behavior.

Type: String

Required: No

metricDimension
The dimension for a metric in your behavior. For example, using a TOPIC_FILTER dimension, you can narrow down the scope of the metric only to MQTT topics whose name match the pattern specified in the dimension.

Type: MetricDimension (p. 712) object

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 Java
- AWS SDK for Ruby V3
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. 764) object

Required: No
value

The value to be compared with the **metric**.

Type: MetricValue (p. 714) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
CACertificate
Service: AWS IoT
A CA certificate.

Contents

certificateArn
  The ARN of the CA certificate.
  Type: String
  Required: No

certificateId
  The ID of the CA certificate.
  Type: String
  Length Constraints: Fixed length of 64.
  Pattern: (0x)?[a-fA-F0-9]+
  Required: No

creationDate
  The date the CA certificate was created.
  Type: Timestamp
  Required: No

status
  The status of the CA certificate.
  The status value REGISTER_INACTIVE is deprecated and should not be used.
  Type: String
  Valid Values: ACTIVE | INACTIVE
  Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**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. 653) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
Certificate
Service: AWS IoT
Information about a certificate.

Contents

certificateArn
The ARN of the certificate.
Type: String
Required: No

certificateId
The ID of the certificate. (The last part of the certificate ARN contains the certificate ID.)
Type: String
Length Constraints: Fixed length of 64.
Pattern: (0x)?[a-fA-F0-9]+
Required: No

creationDate
The date and time the certificate was created.
Type: Timestamp
Required: No

status
The status of the certificate.
The status value REGISTER_INACTIVE is deprecated and should not be used.
Type: String
Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING_TRANSFER | REGISTER_INACTIVE | PENDING_ACTIVATION
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for Ruby V3
CertificateDescription
Service: AWS IoT
Describes a certificate.

Contents

certificateId
  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.
CertificateDescription

- **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. 804) object
  - Required: No

- **validity**
  - When the certificate is valid.
  - Type: CertificateValidity (p. 653) object
  - Required: No
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
CloudwatchAlarmAction
Service: AWS IoT

Describes an action that updates a CloudWatch alarm.

Contents

alarmName
The CloudWatch alarm name.
Type: String
Required: Yes

roleArn
The IAM role that allows access to the CloudWatch alarm.
Type: String
Required: Yes

stateReason
The reason for the alarm change.
Type: String
Required: Yes

stateValue
The value of the alarm state. Acceptable values are: OK, ALARM, INSUFFICIENT_DATA.
Type: String
Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CloudwatchLogsAction
Service: AWS IoT

Describes an action that sends data to CloudWatch Logs.

Contents

**logGroupName**

The CloudWatch log group to which the action sends data.

Type: String
Required: Yes

**roleArn**

The IAM role that allows access to the CloudWatch log.

Type: String
Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CloudwatchMetricAction
Service: AWS IoT

Describes an action that captures a CloudWatch metric.

Contents

metricName
The CloudWatch metric name.
Type: String
Required: Yes

metricNamespace
The CloudWatch metric namespace name.
Type: String
Required: Yes

metricTimestamp
An optional Unix timestamp.
Type: String
Required: No

metricUnit
The metric unit supported by CloudWatch.
Type: String
Required: Yes

metricValue
The CloudWatch metric value.
Type: String
Required: Yes

roleArn
The IAM role that allows access to the CloudWatch metric.
Type: String
Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**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. 662)` object  
Required: No  

**startSigningJobParameter**  
Describes the code-signing job.  
Type: `StartSigningJobParameter (p. 763)` object  
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:  
- AWS SDK for C++  
- AWS SDK for Go  
- AWS SDK for Java  
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
Configuration
Service: AWS IoT

Contents

Enabled
True to enable the configuration.
Type: Boolean
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
CustomCodeSigning

Service: AWS IoT

Describes a custom method used to code sign a file.

Contents

certificateChain

The certificate chain.

Type: CodeSigningCertificateChain (p. 659) 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. 660) object

Required: No

signatureAlgorithm

The signature algorithm used to code sign the file.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
Denied

Service: AWS IoT

Contains information that denied the authorization.

Contents

explicitDeny

Information that explicitly denies the authorization.

Type: ExplicitDeny (p. 673) 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. 687) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
Destination
Service: AWS IoT

Describes the location of the updated firmware.

Contents

s3Destination

Describes the location in S3 of the updated firmware.

Type: S3Destination (p. 750) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
DomainConfigurationSummary
Service: AWS IoT

The summary of a domain configuration. A domain configuration specifies custom IoT-specific information about a domain. A domain configuration can be associated with an AWS-managed domain (for example, dbc123defghij.k,iot.us-west-2.amazonaws.com), a customer managed domain, or a default endpoint.

- Data
- Jobs
- CredentialProvider

**Note**
The domain configuration feature is in public preview and is subject to change.

**Contents**

domainConfigurationArn
The ARN of the domain configuration.
Type: String
Required: No
domainConfigurationName
The name of the domain configuration. This value must be unique to a region.
Type: String
Pattern: [\w.:-]+
Required: No

serviceType
The type of service delivered by the endpoint.
Type: String

Valid Values: DATA | CREDENTIAL_PROVIDER | JOBS
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
DynamoDBAction

Service: AWS IoT

Describes an action to write to a DynamoDB table.

The tableName, hashKeyField, and rangeKeyField values must match the values used when you created the table.

The hashKeyValue and rangeKeyValue fields use a substitution template syntax. These templates provide data at runtime. The syntax is as follows: `${sql-expression}`.

You can specify any valid expression in a WHERE or SELECT clause, including JSON properties, comparisons, calculations, and functions. For example, the following field uses the third level of the topic:

"hashKeyValue": "${topic(3)}"

The following field uses the timestamp:

"rangeKeyValue": "${timestamp()}"

Contents

hashKeyField

The hash key name.

Type: String

Required: Yes

hashKeyType

The hash key type. Valid values are "STRING" or "NUMBER"

Type: String

Valid Values: STRING | NUMBER

Required: No

hashKeyValue

The hash key value.

Type: String

Required: Yes

operation

The type of operation to be performed. This follows the substitution template, so it can be `${operation}`, but the substitution must result in one of the following: INSERT, UPDATE, or DELETE.

Type: String

Required: No

payloadField

The action payload. This name can be customized.
Type: String
Required: No

**rangeKeyField**

The range key name.
Type: String
Required: No

**rangeKeyType**

The range key type. Valid values are "STRING" or "NUMBER"
Type: String
Valid Values: STRING | NUMBER
Required: No

**rangeKeyValue**

The range key value.
Type: String
Required: No

**roleArn**

The ARN of the IAM role that grants access to the DynamoDB table.
Type: String
Required: Yes

**tableName**

The name of the DynamoDB table.
Type: String
Required: Yes

---

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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:

```
{ "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. 739) 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 Java
- AWS SDK for Ruby V3
EffectivePolicy
Service: AWS IoT

The policy that has the effect on the authorization results.

Contents

policyArn
The policy ARN.
Type: String
Required: No

policyDocument
The IAM policy document.
Type: String
Required: No

policyName
The policy name.
Type: String
Pattern: [\w+=,.@-]+
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ElasticsearchAction
Service: AWS IoT

Describes an action that writes data to an Amazon Elasticsearch Service domain.

Contents

endpoint

The endpoint of your Elasticsearch domain.
Type: String
Pattern: https://.*
Required: Yes

id

The unique identifier for the document you are storing.
Type: String
Required: Yes

index

The Elasticsearch index where you want to store your data.
Type: String
Required: Yes

roleArn

The IAM role ARN that has access to Elasticsearch.
Type: String
Required: Yes

type

The type of document you are storing.
Type: String
Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
EnableIoTLoggingParams
Service: AWS IoT
Parameters used when defining a mitigation action that enable AWS IoT logging.

Contents

logLevel
Specifies the types of information to be logged.
Type: String
Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED
Required: Yes

roleArnForLogging
The ARN of the IAM role used for logging.
Type: String
Required: Yes

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ErrorInfo
Service: AWS IoT

Error information.

Contents

code
The error code.
Type: String
Required: No

message
The error message.
Type: String
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ExplicitDeny
Service: AWS IoT

Information that explicitly denies authorization.

Contents

policies

The policies that denied the authorization.

Type: Array of Policy (p. 729) objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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. 740) 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 Java
- AWS SDK for Ruby V3
Field
Service: AWS IoT

Describes the name and data type at a field.

Contents

name

The name of the field.
Type: String
Required: No

type

The datatype of the field.
Type: String
Valid Values: Number | String | Boolean
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
FileLocation
Service: AWS IoT

The location of the OTA update.

Contents

s3Location
The location of the updated firmware in S3.
Type: S3Location (p. 751) object
Required: No

stream
The stream that contains the OTA update.
Type: Stream (p. 768) object
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
FirehoseAction
Service: AWS IoT

Describes an action that writes data to an Amazon Kinesis Firehose stream.

Contents

deliveryStreamName
The delivery stream name.
Type: String
Required: Yes

roleArn
The IAM role that grants access to the Amazon Kinesis Firehose stream.
Type: String
Required: Yes

separator
A character separator that will be used to separate records written to the Firehose stream. Valid values are: \n (newline), \t (tab), \r\n (Windows newline), , (comma).
Type: String
Pattern: ([\n\t])|([\r\n])|,)
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
GroupNameAndArn

Service: AWS IoT

The name and ARN of a group.

Contents

groupArn

The group ARN.

Type: String

Required: No

groupName

The group name.

Type: String


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

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
HttpAction

Service: AWS IoT

Send data to an HTTPS endpoint.

Contents

auth

The authentication method to use when sending data to an HTTPS endpoint.

Type: HttpAuthorization (p. 682) object

Required: No

confirmationUrl

The URL to which AWS IoT sends a confirmation message. The value of the confirmation URL must be a prefix of the endpoint URL. If you do not specify a confirmation URL AWS IoT uses the endpoint URL as the confirmation URL. If you use substitution templates in the confirmationUrl, you must create and enable topic rule destinations that match each possible value of the substitution template before traffic is allowed to your endpoint URL.

Type: String


Required: No

headers

The HTTP headers to send with the message data.

Type: Array of HttpActionHeader (p. 681) objects

Array Members: Minimum number of 0 items. Maximum number of 100 items.

Required: No

url

The endpoint URL. If substitution templates are used in the URL, you must also specify a confirmationUrl. If this is a new destination, a new TopicRuleDestination is created if possible.

Type: String


Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
HttpActionHeader

Service: AWS IoT

The HTTP action header.

Contents

key

The HTTP header key.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

value

The HTTP header value. Substitution templates are supported.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
HttpAuthorization

Service: AWS IoT

The authorization method used to send messages.

Contents

sigv4

Use Sig V4 authorization. For more information, see Signature Version 4 Signing Process.

Type: SigV4Authorization (p. 760) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
HttpContext

Service: AWS IoT

Specifies the HTTP context to use for the test authorizer request.

Contents

headers

The header keys and values in an HTTP authorization request.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 8192.


Required: No

queryString

The query string keys and values in an HTTP authorization request.

Type: String


Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
HttpUrlDestinationConfiguration

Service: AWS IoT

HTTP URL destination configuration used by the topic rule's HTTP action.

Contents

confirmationUrl

The URL AWS IoT uses to confirm ownership of or access to the topic rule destination URL.

Type: String


Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
HttpUrlDestinationProperties
Service: AWS IoT

HTTP URL destination properties.

Contents

confirmationUrl
   The URL used to confirm the HTTP topic rule destination URL.
   Type: String
   Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
HttpUrlDestinationSummary
Service: AWS IoT

Information about an HTTP URL destination.

Contents

confirmationUrl

The URL used to confirm ownership of or access to the HTTP topic rule destination URL.

Type: String
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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. 729) objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
IotAnalyticsAction

Service: AWS IoT

Sends message data to an AWS IoT Analytics channel.

Contents

channelArn

(deprecated) The ARN of the IoT Analytics channel to which message data will be sent.

Type: String

Required: No

channelName

The name of the IoT Analytics channel to which message data will be sent.

Type: String

Required: No

roleArn

The ARN of the role which has a policy that grants IoT Analytics permission to send message data via IoT Analytics (iotanalytics:BatchPutMessage).

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
IotSiteWiseAction
Service: AWS IoT

Describes an action to send data from an MQTT message that triggered the rule to AWS IoT SiteWise asset properties.

Contents

putAssetPropertyValueEntries

A list of asset property value entries.

Type: Array of PutAssetPropertyValueEntry (p. 737) objects

Array Members: Minimum number of 1 item.

Required: Yes

roleArn

The ARN of the role that grants AWS IoT permission to send an asset property value to AWS IoTSiteWise ("Action": "iotsitewise:BatchPutAssetPropertyValue"). The trust policy can restrict access to specific asset hierarchy paths.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
Job
Service: AWS IoT

The Job object contains details about a job.

Contents

abortConfig
Configuration for criteria to abort the job.
Type: AbortConfig (p. 608) 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. 696) 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. 702) 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. 732) 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}\_]+

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
**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. 792) object

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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. 697) object

Required: No

ingThingArn

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 Java
- AWS SDK for Ruby V3
JobExecutionsRolloutConfig

Service: AWS IoT

Allows you to create a staged rollout of a job.

Contents

expontialRate

The rate of increase for a job rollout. This parameter allows you to define an exponential rate for a job rollout.

Type: ExponentialRolloutRate (p. 674) 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 Java
- AWS SDK for Ruby V3
JobExecutionStatusDetails
Service: AWS IoT
Details of the job execution status.

Contents

detailsMap

The job execution status.
Type: String to string map
Key Length Constraints: Minimum length of 1. Maximum length of 128.
Key Pattern: [a-zA-Z0-9_:\-\_]+
Value Pattern: [^\p{C}]++
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
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. 698) object

Required: No

thingArn

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

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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. 698) object
Required: No

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

Type: String
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: \[a-zA-Z0-9\-\_\-]+\]
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
JobProcessDetails
Service: AWS IoT
The job process details.

Contents

numberOfCanceledThings
The number of things that cancelled the job.
Type: Integer
Required: No

numberOfFailedThings
The number of things that failed executing the job.
Type: Integer
Required: No

numberOfInProgressThings
The number of things currently executing the job.
Type: Integer
Required: No

numberOfQueuedThings
The number of things that are awaiting execution of the job.
Type: Integer
Required: No

numberOfRejectedThings
The number of things that rejected the job.
Type: Integer
Required: No

numberOfRemovedThings
The number of things that are no longer scheduled to execute the job because they have been deleted or have been removed from the group that was a target of the job.
Type: Integer
Required: No

numberOfSucceededThings
The number of things which successfully completed the job.
Type: Integer
Required: No
**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 Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
**KeyPair**

*Service: AWS IoT*

Describes a key pair.

**Contents**

**PrivateKey**

The private key.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**PublicKey**

The public key.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
KinesisAction
Service: AWS IoT

Describes an action to write data to an Amazon Kinesis stream.

Contents

partitionKey
The partition key.
Type: String
Required: No

roleArn
The ARN of the IAM role that grants access to the Amazon Kinesis stream.
Type: String
Required: Yes

streamName
The name of the Amazon Kinesis stream.
Type: String
Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
LambdaAction
Service: AWS IoT

Describes an action to invoke a Lambda function.

Contents

functionArn

The ARN of the Lambda function.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
LoggingOptionsPayload

Service: AWS IoT

Describes the logging options payload.

Contents

logLevel

The log level.

Type: String

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

Required: No

roleArn

The ARN of the IAM role that grants access.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
LogTarget
Service: AWS IoT

A log target.

Contents

targetName
  The target name.
  Type: String
  Required: No

targetType
  The target type.
  Type: String
  Valid Values: DEFAULT | THING_GROUP
  Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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. 710) object
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
MetricDimension
Service: AWS IoT
The dimension of a metric.

Contents

**dimensionName**
A unique identifier for the dimension.
Type: String
Pattern: [a-zA-Z0-9:_-]+
Required: Yes

**operator**
Defines how the dimensionValues of a dimension are interpreted. For example, for dimension
type TOPIC_FILTER, the IN operator, a message will be counted only if its topic matches one of the
topic filters. With NOT_IN operator, a message will be counted only if it doesn't match any of the
topic filters. The operator is optional: if it's not provided (is null), it will be interpreted as IN.
Type: String
Valid Values: IN | NOT_IN
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
MetricToRetain
Service: AWS IoT

The metric you want to retain. Dimensions are optional.

Contents

metric
What is measured by the behavior.

Type: String

Required: Yes

metricDimension
The dimension of a metric.

Type: MetricDimension (p. 712) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
MetricValue
Service: AWS IoT

The value to be compared with the metric.

Contents

**cidrs**

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-fA-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 Java
- AWS SDK for Ruby V3
MitigationAction

Service: AWS IoT

Describes which changes should be applied as part of a mitigation action.

Contents

actionParams

The set of parameters for this mitigation action. The parameters vary, depending on the kind of action you apply.

Type: MitigationActionParams (p. 717) object

Required: No

id

A unique identifier for the mitigation action.

Type: String

Required: No

name

A user-friendly name for the mitigation action.

Type: String

Length Constraints: Maximum length of 128.

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

Required: No

roleArn

The IAM role ARN used to apply this mitigation action.

Type: String


Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
MitigationActionIdentifier

Service: AWS IoT

Information that identifies a mitigation action. This information is returned by ListMitigationActions.

Contents

actionArn
The IAM role ARN used to apply this mitigation action.
Type: String
Required: No

actionName
The friendly name of the mitigation action.
Type: String
Length Constraints: Maximum length of 128.
Pattern: [a-zA-Z0-9-._]+
Required: No

creationDate
The date when this mitigation action 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 Java
- AWS SDK for Ruby V3
MitigationActionParams

Service: AWS IoT

The set of parameters for this mitigation action. You can specify only one type of parameter (in other words, you can apply only one action for each defined mitigation action).

Contents

addThingsToThingGroupParams

Parameters to define a mitigation action that moves devices associated with a certificate to one or more specified thing groups, typically for quarantine.

Type: AddThingsToThingGroupParams (p. 615) object

Required: No

enableIoTLoggingParams

Parameters to define a mitigation action that enables AWS IoT logging at a specified level of detail.

Type: EnableIoTLoggingParams (p. 671) object

Required: No

publishFindingToSnsParams

Parameters to define a mitigation action that publishes findings to Amazon SNS. You can implement your own custom actions in response to the Amazon SNS messages.

Type: PublishFindingToSnsParams (p. 736) object

Required: No

replaceDefaultPolicyVersionParams

Parameters to define a mitigation action that adds a blank policy to restrict permissions.

Type: ReplaceDefaultPolicyVersionParams (p. 743) object

Required: No

updateCACertificateParams

Parameters to define a mitigation action that changes the state of the CA certificate to inactive.

Type: UpdateCACertificateParams (p. 805) object

Required: No

updateDeviceCertificateParams

Parameters to define a mitigation action that changes the state of the device certificate to inactive.

Type: UpdateDeviceCertificateParams (p. 806) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for Ruby V3
MqttContext
Service: AWS IoT

Specifies the MQTT context to use for the test authorizer request

Contents

clientId
The value of the clientId key in an MQTT authorization request.
Type: String
Required: No

password
The value of the password key in an MQTT authorization request.
Type: Base64-encoded binary data object
Required: No

username
The value of the username key in an MQTT authorization request.
Type: String
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
NonCompliantResource
Service: AWS IoT

Information about the resource that was noncompliant with the audit check.

Contents

additionalInfo

Other information about the noncompliant resource.

Type: String to string map

Required: No

resourceIdentifier

Information that identifies the noncompliant resource.

Type: ResourceIdentifier (p. 745) object

Required: No

resourceType

The type of the noncompliant resource.

Type: String

Valid Values: DEVICE_CERTIFICATE | CA_CERTIFICATE | IOT_POLICY | COGNITO_IDENTITY_POOL | CLIENT_ID | ACCOUNT_SETTINGS | ROLE_ALIAS | IAM_ROLE

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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. 658) object

Required: No

**fileLocation**

The location of the updated firmware.

Type: FileLocation (p. 676) 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 Java
- AWS SDK for Ruby V3
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. 639) object
Required: No

awsJobPresignedUrlConfig
Configuration information for pre-signed URLs. Valid when protocols contains HTTP.
Type: AwsJobPresignedUrlConfig (p. 640) 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}]+
**errorInfo**

Error information associated with the OTA update.

Type: `ErrorInfo (p. 672)` object

Required: No

**lastModifiedDate**

The date when the OTA update was last updated.

Type: `Timestamp`

Required: No

**otaUpdateArn**

The OTA update ARN.

Type: `String`

Required: No

**otaUpdateFiles**

A list of files associated with the OTA update.

Type: Array of `OTAUpdateFile (p. 721)` 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

**protocols**

The protocol used to transfer the OTA update image. Valid values are `[HTTP]`, `[MQTT]`, `[HTTP, MQTT]`. When both HTTP and MQTT are specified, the target device can choose the protocol.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 2 items.
Valid Values: MQTT | HTTP

Required: No

targets

The targets of the OTA update.

Type: Array of strings

Array Members: Minimum number of 1 item.

Required: No

targetSelection

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

Type: String

Valid Values: CONTINUOUS | SNAPSHOT

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
OTAUpdateSummary
Service: AWS IoT

An OTA update summary.

Contents

creationDate
The date when the OTA update was created.
Type: Timestamp
Required: No

otaUpdateArn
The OTA update ARN.
Type: String
Required: No

otaUpdateId
The OTA update ID.
Type: String
Pattern: [a-zA-Z0-9_-]+
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
PercentPair
Service: AWS IoT

Describes the percentile and percentile value.

Contents

percent
The percentile.
Type: Double
Valid Range: Minimum value of 0. Maximum value of 100.
Required: No

value
The value of the percentile.
Type: Double
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
Policy
Service: AWS IoT

Describes an AWS IoT policy.

Contents

policyArn
The policy ARN.
Type: String
Required: No

policyName
The policy name.
Type: String
Pattern: [\w+=,.@-]+
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
PolicyVersion
Service: AWS IoT

Describes a policy version.

Contents

createDate
The date and time the policy was created.
Type: Timestamp
Required: No

isDefaultVersion
Specifies whether the policy version is the default.
Type: Boolean
Required: No

versionId
The policy version ID.
Type: String
Pattern: [0-9]+
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
PresignedUrlConfig

Service: AWS IoT

Configuration for pre-signed S3 URLs.

Contents

expiresInSec

How long (in seconds) pre-signed URLs are valid. Valid values are 60 - 3600, the default value is 3600 seconds. Pre-signed URLs are generated when Jobs receives an MQTT request for the job document.

Type: Long

Valid Range: Minimum value of 60. Maximum value of 3600.

Required: No

roleArn

The ARN of an IAM role that grants permission to download files from the S3 bucket where the job data/updates are stored. The role must also grant permission for IoT to download the files.

Type: String


Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ProvisioningTemplateSummary
Service: AWS IoT
A summary of information about a fleet provisioning template.

Contents

creationDate
The date when the fleet provisioning template summary was created.
Type: Timestamp
Required: No

description
The description of the fleet provisioning template.
Type: String
Length Constraints: Minimum length of 0. Maximum length of 500.
Pattern: [^\p{C}]*
Required: No

enabled
True if the fleet provision template is enabled, otherwise false.
Type: Boolean
Required: No

lastModifiedDate
The date when the fleet provisioning template summary was last modified.
Type: Timestamp
Required: No

templateArn
The ARN of the fleet provisioning template.
Type: String
Required: No

templateName
The name of the fleet provisioning template.
Type: String
Pattern: ^[0-9A-Za-z_-]+$
Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ProvisioningTemplateVersionSummary

Service: AWS IoT

A summary of information about a fleet provision template version.

Contents

creationDate

The date when the fleet provisioning template version was created

Type: Timestamp

Required: No

isDefaultVersion

True if the fleet provisioning template version is the default version, otherwise false.

Type: Boolean

Required: No

versionId

The ID of the fleet provisioning template version.

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 Java
- AWS SDK for Ruby V3
PublishFindingToSnsParams

Service: AWS IoT

Parameters to define a mitigation action that publishes findings to Amazon SNS. You can implement your own custom actions in response to the Amazon SNS messages.

Contents

**topicArn**

The ARN of the topic to which you want to publish the findings.

Type: String

Length Constraints: Maximum length of 350.

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
PutAssetPropertyValueEntry

Service: AWS IoT

An asset property value entry containing the following information.

Contents

**assetId**

The ID of the AWS IoT SiteWise asset. You must specify either a propertyAlias or both an aliasId and a propertyId. Accepts substitution templates.

Type: String

Required: No

**entryId**

Optional. A unique identifier for this entry that you can define to better track which message caused an error in case of failure. Accepts substitution templates. Defaults to a new UUID.

Type: String

Required: No

**propertyAlias**

The name of the property alias associated with your asset property. You must specify either a propertyAlias or both an aliasId and a propertyId. Accepts substitution templates.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

**propertyId**

The ID of the asset's property. You must specify either a propertyAlias or both an aliasId and a propertyId. Accepts substitution templates.

Type: String

Required: No

**propertyValues**

A list of property values to insert that each contain timestamp, quality, and value (TQV) information.

Type: Array of AssetPropertyValue (p. 619) 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 IoT API Reference
PutAssetPropertyValueEntry

- AWS SDK for Java
- AWS SDK for Ruby V3
PutItemInput
Service: AWS IoT

The input for the DynamoActionVS action that specifies the DynamoDB table to which the message data will be written.

Contents

tableName
The table where the message data will be written.
Type: String
Required: Yes

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
RegistrationConfig

Service: AWS IoT

The registration configuration.

Contents

roleArn

The ARN of the role.

Type: String


Required: No

templateBody

The template body.

Type: String

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
RelatedResource
Service: AWS IoT
Information about a related resource.

Contents

additionalInfo
Other information about the resource.
Type: String to string map
Required: No

resourceIdentifier
Information that identifies the resource.
Type: ResourceIdentifier (p. 745) 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 | ROLE_ALIAS | IAM_ROLE
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ReplaceDefaultPolicyVersionParams

Service: AWS IoT

Parameters to define a mitigation action that adds a blank policy to restrict permissions.

Contents

templateName

The name of the template to be applied. The only supported value is BLANK_POLICY.

Type: String

Valid Values: BLANK_POLICY

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
RepublishAction
Service: AWS IoT

Describes an action to republish to another topic.

Contents

qos
The Quality of Service (QoS) level to use when republishing messages. The default value is 0.
Type: Integer
Valid Range: Minimum value of 0. Maximum value of 1.
Required: No

roleArn
The ARN of the IAM role that grants access.
Type: String
Required: Yes

topic
The name of the MQTT topic.
Type: String
Required: Yes

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**ResourceIdentifier**

Service: AWS IoT

Information that identifies the noncompliant resource.

## Contents

**account**

The account with which the resource is associated.

Type: String

Length Constraints: Fixed length of 12.

Pattern: \[0-9]+\n
Required: No

**caCertificateId**

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]+\n
Required: No

**clientId**

The client ID.

Type: String

Required: No

**cognitoIdentityPoolId**

The ID of the Amazon 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]+\n
Required: No

**iamRoleArn**

The ARN of the IAM role that has overly permissive actions.

Type: String
ResourceIdentifier


Required: No

**policyVersionIdentifier**

The version of the policy associated with the resource.

Type: PolicyVersionIdentifier (p. 731) object

Required: No

**roleAliasArn**

The ARN of the role alias that has overly permissive actions.

Type: String

Length Constraints: Minimum length of 1. 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 Java
- AWS SDK for Ruby V3
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
Length Constraints: Minimum length of 1. Maximum length of 2048.
RoleAliasDescription

Required: No

**roleArn**

The role ARN.

Type: String


Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
S3Action
Service: AWS IoT

Describes an action to write data to an Amazon S3 bucket.

Contents

bucketName
The Amazon S3 bucket.
Type: String
Required: Yes

cannedAcl
The Amazon S3 canned ACL that controls access to the object identified by the object key. For more information, see S3 canned ACLs.
Type: String
Valid Values: private | public-read | public-read-write | aws-exec-read | authenticated-read | bucket-owner-read | bucket-owner-full-control | log-delivery-write
Required: No

key
The object key.
Type: String
Required: Yes

roleArn
The ARN of the IAM role that grants access.
Type: String
Required: Yes

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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

code

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 Java
- AWS SDK for Ruby V3
**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 Java
- AWS SDK for Ruby V3
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]{1,}\.(sfdc-matrix\.net)|(sfdcnow\.com)/streams/\{1,20\}/\{1,20\}/event

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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[012]|3[01])|31)$|^LAST$

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 occurs.

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 Java
• AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
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. 755) object
Required: No

target
Information about the target (thing group) associated with the security profile.
Type: SecurityProfileTarget (p. 756) object
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ServerCertificateSummary
Service: AWS IoT

An object that contains information about a server certificate.

Contents

serverCertificateArn
   The ARN of the server certificate.
   Type: String
   Length Constraints: Minimum length of 1. Maximum length of 2048.
   Pattern: arn:aws:acm:[a-z]{2}-(gov-)?[a-z]{4,9}-\d{1}:\d{12}:certificate/?[a-zA-Z0-9/-]+
   Required: No

serverCertificateStatus
   The status of the server certificate.
   Type: String
   Valid Values: INVALID | VALID
   Required: No

serverCertificateStatusDetail
   Details that explain the status of the server certificate.
   Type: String
   Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
SigV4Authorization
Service: AWS IoT

Use Sig V4 authorization.

Contents

roleArn
The ARN of the signing role.
Type: String
Required: Yes

serviceName
The service name to use while signing with Sig V4.
Type: String
Required: Yes

signingRegion
The signing region.
Type: String
Required: Yes

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
SqsAction
Service: AWS IoT

Describes an action to publish data to an Amazon SQS queue.

Contents

queueUrl
The URL of the Amazon SQS queue.
Type: String
Required: Yes

roleArn
The ARN of the IAM role that grants access.
Type: String
Required: Yes

useBase64
Specifies whether to use Base64 encoding.
Type: Boolean
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
StartSigningJobParameter

Service: AWS IoT

Information required to start a signing job.

Contents

destination

The location to write the code-signed file.

- Type: Destination (p. 664) object
- Required: No

signingProfileName

The code-signing profile name.

- Type: String
- Required: No

signingProfileParameter

Describes the code-signing profile.

- Type: SigningProfileParameter (p. 759) object
- Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
Statistics
Service: AWS IoT

A map of key-value pairs for all supported statistics. Currently, only count is supported.

Contents

average
The average of the aggregated field values.
Type: Double
Required: No

count
The count of things that match the query.
Type: Integer
Required: No

maximum
The maximum aggregated field value.
Type: Double
Required: No

minimum
The minimum aggregated field value.
Type: Double
Required: No

stdDeviation
The standard deviation of the aggregated field values.
Type: Double
Required: No

sum
The sum of the aggregated field values.
Type: Double
Required: No

sumOfSquares
The sum of the squares of the aggregated field values.
Type: Double
Required: No

variance
The variance of the aggregated field values.
Type: Double
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**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 Java
- AWS SDK for Ruby V3
Stream
Service: AWS IoT

Describes a group of files that can be streamed.

Contents

fileId
The ID of a file associated with a stream.
Type: Integer
Valid Range: Minimum value of 0. Maximum value of 255.
Required: No

streamId
The stream ID.
Type: String
Pattern: [a-zA-Z0-9_\-]+
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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. 751) object
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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. 769) 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.
Type: String


Pattern: [a-zA-Z0-9_\-\_]+

Required: No

streamVersion

The stream version.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 65535.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
StreamSummary
Service: AWS IoT
A summary of a stream.

Contents

description
A description of the stream.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: [^\p{C}]+
Required: No

streamArn
The stream ARN.
Type: String
Required: No

streamId
The stream ID.
Type: String
Pattern: [a-zA-Z0-9_\-]+
Required: No

streamVersion
The stream version.
Type: Integer
Valid Range: Minimum value of 0. Maximum value of 65535.
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
**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 noncompliant 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 Java
- AWS SDK for Ruby V3
TaskStatisticsForAuditCheck

Service: AWS IoT

Provides summary counts of how many tasks for findings are in a particular state. This information is included in the response from DescribeAuditMitigationActionsTask.

Contents

canceledFindingsCount

The number of findings to which the mitigation action task was canceled when applied.

Type: Long

Required: No

failedFindingsCount

The number of findings for which at least one of the actions failed when applied.

Type: Long

Required: No

skippedFindingsCount

The number of findings skipped because of filter conditions provided in the parameters to the command.

Type: Long

Required: No

succeededFindingsCount

The number of findings for which all mitigation actions succeeded when applied.

Type: Long

Required: No

totalFindingsCount

The total number of findings to which a task is being applied.

Type: Long

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**ThingAttribute**

Service: AWS IoT

The properties of the thing, including thing name, thing type name, and a list of thing attributes.

**Contents**

**attributes**

A list of thing attributes which are name-value pairs.

Type: String to string map

Key Length Constraints: Maximum length of 128.

Key Pattern: [a-zA-Z0-9_.,@/:#-]+  

Value Length Constraints: Maximum length of 800.

Value Pattern: [a-zA-Z0-9_.,@/:#-]*  

Required: No

**thingArn**

The thing ARN.

Type: String

Required: No

**thingName**

The name of the thing.

Type: String


Pattern: [a-zA-Z0-9:.-]+  

Required: No

**thingTypeName**

The name of the thing type, if the thing has been associated with a type.

Type: String


Pattern: [a-zA-Z0-9:.-]+  

Required: No

**version**

The version of the thing record in the registry.

Type: Long

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
**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. 779) 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 Java
- AWS SDK for Ruby V3
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

parentGroupNames

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 Java
- AWS SDK for Ruby V3
ThingGroupIndexingConfiguration

Service: AWS IoT

Thing group indexing configuration.

Contents

customFields

A list of thing group fields to index. This list cannot contain any managed fields. Use the GetIndexingConfiguration API to get a list of managed fields.

Contains custom field names and their data type.

Type: Array of Field (p. 675) objects

Required: No

managedFields

Contains fields that are indexed and whose types are already known by the Fleet Indexing service.

Type: Array of Field (p. 675) objects

Required: No

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 Java
- AWS SDK for Ruby V3
**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. 678) objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**ThingGroupProperties**

Service: AWS IoT

Thing group properties.

**Contents**

**attributePayload**

The thing group attributes in JSON format.

Type: `AttributePayload (p. 621)` object

Required: No

**thingGroupDescription**

The thing group description.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: `[ \p{Graph}\x20]*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**ThingIndexingConfiguration**

Service: AWS IoT

The thing indexing configuration. For more information, see Managing Thing Indexing.

**Contents**

**customFields**

Contains custom field names and their data type.

Type: Array of Field (p. 675) objects

Required: No

**managedFields**

Contains fields that are indexed and whose types are already known by the Fleet Indexing service.

Type: Array of Field (p. 675) objects

Required: No

**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 Java
- AWS SDK for Ruby V3
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. 790) 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. 791) object
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**ThingTypeMetadata**

Service: AWS IoT

The ThingTypeMetadata contains additional information about the thing type including: creation date and time, a value indicating whether the thing type is deprecated, and a date and time when time was deprecated.

**Contents**

**creationDate**

The date and time when the thing type was created.

Type: Timestamp

Required: No

**deprecated**

Whether the thing type is deprecated. If `true`, no new things could be associated with this type.

Type: Boolean

Required: No

**deprecationDate**

The date and time when the thing type was deprecated.

Type: Timestamp

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
ThingTypeProperties

Service: AWS IoT

The ThingTypeProperties contains information about the thing type including: a thing type description, and a list of searchable thing attribute names.

Contents

searchableAttributes

A list of searchable thing attribute names.

Type: Array of strings

Length Constraints: Maximum length of 128.

Pattern: [a-zA-Z0-9_.,@/:#-]+

Required: No

thingTypeDescription

The description of the thing type.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [\p{Graph}\x20]*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
**TlsContext**

Service: AWS IoT

Specifies the TLS context to use for the test authorizer request.

**Contents**

**serverName**

The value of the `serverName` key in a TLS authorization request.

Type: String


Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**TopicRule**

Service: AWS IoT

Describes a rule.

**Contents**

**actions**

The actions associated with the rule.

Type: Array of *Action (p. 610)* 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. 610)* object

Required: No

**ruleDisabled**

Specifies whether the rule is disabled.

Type: Boolean

Required: No

**ruleName**

The name of the rule.

Type: String

Pattern: ^[a-zA-Z0-9_]+$  
Required: No

sql

The SQL statement used to query the topic. When using a SQL query with multiple lines, be sure to escape the newline characters.

Type: String
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**TopicRuleDestination**

Service: AWS IoT

A topic rule destination.

**Contents**

**arn**

The topic rule destination URL.

Type: String

Required: No

**httpUrlProperties**

Properties of the HTTP URL.

Type: `HttpUrlDestinationProperties (p. 685)` object

Required: No

**status**

The status of the topic rule destination. Valid values are:

- **IN_PROGRESS**
  
  A topic rule destination was created but has not been confirmed. You can set status to **IN_PROGRESS** by calling `UpdateTopicRuleDestination`. Calling `UpdateTopicRuleDestination` causes a new confirmation challenge to be sent to your confirmation endpoint.

- **ENABLED**

  Confirmation was completed, and traffic to this destination is allowed. You can set status to **DISABLED** by calling `UpdateTopicRuleDestination`.

- **DISABLED**

  Confirmation was completed, and traffic to this destination is not allowed. You can set status to **ENABLED** by calling `UpdateTopicRuleDestination`.

- **ERROR**

  Confirmation could not be completed, for example if the confirmation timed out. You can call `GetTopicRuleDestination` for details about the error. You can set status to **IN_PROGRESS** by calling `UpdateTopicRuleDestination`. Calling `UpdateTopicRuleDestination` causes a new confirmation challenge to be sent to your confirmation endpoint.

Type: String

Valid Values: **ENABLED** | **IN_PROGRESS** | **DISABLED** | **ERROR**

Required: No

**statusReason**

Additional details or reason why the topic rule destination is in the current status.

Type: String

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**TopicRuleDestinationConfiguration**

Service: AWS IoT

Configuration of the topic rule destination.

**Contents**

**httpUrlConfiguration**

Configuration of the HTTP URL.

Type: `HttpUrlDestinationConfiguration (p. 684)` object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**TopicRuleDestinationSummary**

Service: AWS IoT

Information about the topic rule destination.

**Contents**

**arn**

The topic rule destination ARN.

Type: String

Required: No

**httpUrlSummary**

Information about the HTTP URL.

Type: [HttpUrlDestinationSummary](p. 686) object

Required: No

**status**

The status of the topic rule destination. Valid values are:

- **IN_PROGRESS**
  
  A topic rule destination was created but has not been confirmed. You can set status to IN_PROGRESS by calling UpdateTopicRuleDestination. Calling UpdateTopicRuleDestination causes a new confirmation challenge to be sent to your confirmation endpoint.

- **ENABLED**
  
  Confirmation was completed, and traffic to this destination is allowed. You can set status to DISABLED by calling UpdateTopicRuleDestination.

- **DISABLED**
  
  Confirmation was completed, and traffic to this destination is not allowed. You can set status to ENABLED by calling UpdateTopicRuleDestination.

- **ERROR**
  
  Confirmation could not be completed, for example if the confirmation timed out. You can call GetTopicRuleDestination for details about the error. You can set status to IN_PROGRESS by calling UpdateTopicRuleDestination. Calling UpdateTopicRuleDestination causes a new confirmation challenge to be sent to your confirmation endpoint.

Type: String

Valid Values: ENABLED | IN_PROGRESS | DISABLED | ERROR

Required: No

**statusReason**

The reason the topic rule destination is in the current status.

Type: String

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**TopicRuleListListItem**

Service: AWS IoT

Describes a rule.

**Contents**

**createdAt**

The date and time the rule was created.

Type: Timestamp

Required: No

**ruleArn**

The rule ARN.

Type: String

Required: No

**ruleDisabled**

Specifies whether the rule is disabled.

Type: Boolean

Required: No

**ruleName**

The name of the rule.

Type: String


Pattern: ^[a-zA-Z0-9_]+$

Required: No

**topicPattern**

The pattern for the topic names that apply.

Type: String

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**TopicRulePayload**

Service: AWS IoT

Describes a rule.

**Contents**

actions

The actions associated with the rule.

Type: Array of [Action](#) 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 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](aws-iot-developer-guide) in the AWS IoT Developer Guide.

Type: String

Required: Yes

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for Ruby V3
TransferData

Service: AWS IoT

Data used to transfer a certificate to an AWS account.

Contents

acceptDate

The date the transfer was accepted.

Type: Timestamp

Required: No

rejectDate

The date the transfer was rejected.

Type: Timestamp

Required: No

rejectReason

The reason why the transfer was rejected.

Type: String

Length Constraints: Maximum length of 128.

Required: No

transferDate

The date the transfer took place.

Type: Timestamp

Required: No

transferMessage

The transfer message.

Type: String

Length Constraints: Maximum length of 128.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
UpdateCACertificateParams

Parameters to define a mitigation action that changes the state of the CA certificate to inactive.

Contents

action

The action that you want to apply to the CA certificate. The only supported value is DEACTIVATE.

Type: String

Valid Values: DEACTIVATE

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
UpdateDeviceCertificateParams

Parameters to define a mitigation action that changes the state of the device certificate to inactive.

Contents

action

The action that you want to apply to the device certificate. The only supported value is DEACTIVATE.

Type: String

Valid Values: DEACTIVATE

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**ValidationError**

Service: AWS IoT

Information about an error found in a behavior specification.

**Contents**

**errorMessage**

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 Java
- AWS SDK for Ruby V3
ViolationEvent

Service: AWS IoT

Information about a Device Defender security profile behavior violation.

Contents

behavior

The behavior which was violated.

Type: Behavior (p. 641) object

Required: No

metricValue

The value of the metric (the measurement).

Type: MetricValue (p. 714) 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


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 Java
- AWS SDK for Ruby V3

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. 810)
- JobExecutionState (p. 813)
- JobExecutionSummary (p. 814)
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 Java
AWS SDK for Ruby V3
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 Java
- AWS SDK for Ruby V3
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 IoT Secure Tunneling

The following data types are supported by AWS IoT Secure Tunneling:

- ConnectionState (p. 816)
- DestinationConfig (p. 817)
- Tag (p. 818)
- TimeoutConfig (p. 819)
- Tunnel (p. 820)
- TunnelSummary (p. 822)
ConnectionState
Service: AWS IoT Secure Tunneling
The state of a connection.

Contents

lastUpdatedAt
The last time the connection status was updated.
Type: Timestamp
Required: No

status
The connection status of the tunnel. Valid values are CONNECTED and DISCONNECTED.
Type: String
Valid Values: CONNECTED | DISCONNECTED
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
DestinationConfig
Service: AWS IoT Secure Tunneling
The destination configuration.

Contents

services
A list of service names that identify the target application. Currently, you can only specify a single name. The AWS IoT client running on the destination device reads this value and uses it to look up a port or an IP address and a port. The AWS IoT client instantiates the local proxy which uses this information to connect to the destination application.

Type: Array of strings
Array Members: Fixed number of 1 item.
Pattern: [a-zA-Z0-9:_-]+
Required: Yes

thingName
The name of the IoT thing to which you want to connect.

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 Java
- AWS SDK for Ruby V3
Tag
Service: AWS IoT Secure Tunneling
An arbitrary key/value pair used to add searchable metadata to secure tunnel resources.

Contents

key
The key of the tag.
Type: String
Pattern: ^([^\p{\l}\p{Z}\p{N}_-.:/=\+\@]*)$ Required: Yes

value
The value of the tag.
Type: String
Length Constraints: Minimum length of 0. Maximum length of 256.
Pattern: ^([^\p{\l}\p{Z}\p{N}_-.:/=\+\@]*)$ Required: Yes

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
TimeoutConfig
Service: AWS IoT Secure Tunneling
Tunnel timeout configuration.

Contents

maxLifetimeTimeoutMinutes
The maximum amount of time (in minutes) a tunnel can remain open. If not specified, maxLifetimeTimeoutMinutes defaults to 720 minutes. Valid values are from 1 minute to 12 hours (720 minutes)

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 Java
- AWS SDK for Ruby V3
**Tunnel**

Service: AWS IoT Secure Tunneling

A connection between a source computer and a destination device.

**Contents**

- **createdAt**
  - The time when the tunnel was created.
  - Type: Timestamp
  - Required: No

- **description**
  - A description of the tunnel.
  - Type: String
  - Pattern: \[^\p{C}]{1,2048}\)
  - Required: No

- **destinationConfig**
  - The destination configuration that specifies the thing name of the destination device and a service name that the local proxy uses to connect to the destination application.
  - Type: DestinationConfig (p. 817) object
  - Required: No

- **destinationConnectionState**
  - The connection state of the destination application.
  - Type: ConnectionState (p. 816) object
  - Required: No

- **lastUpdatedAt**
  - The last time the tunnel was updated.
  - Type: Timestamp
  - Required: No

- **sourceConnectionState**
  - The connection state of the source application.
  - Type: ConnectionState (p. 816) object
  - Required: No

- **status**
  - The status of a tunnel. Valid values are: Open and Closed.
  - Type: String
  - Valid Values: OPEN | CLOSED
**tags**
A list of tag metadata associated with the secure tunnel.
Type: Array of Tag (p. 818) objects
Array Members: Minimum number of 1 item. Maximum number of 200 items.
Required: No

**timeoutConfig**
Timeout configuration for the tunnel.
Type: TimeoutConfig (p. 819) object
Required: No

**tunnelArn**
The Amazon Resource Name (ARN) of a tunnel. The tunnel ARN format is
arn:aws:tunnel:<region>:<account-id>:tunnel/<tunnel-id>
Type: String
Required: No

**tunnelId**
A unique alpha-numeric ID that identifies a tunnel.
Type: String
Pattern: [a-zA-Z0-9_\-+=:]\{1,128\}
Required: No

**See Also**
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
TunnelSummary
Service: AWS IoT Secure Tunneling

Information about the tunnel.

Contents

createdAt

The time the tunnel was created.
Type: Timestamp
Required: No

description

A description of the tunnel.
Type: String
Pattern: [^\p{C}]{1,2048}
Required: No

lastUpdatedAt

The time the tunnel was last updated.
Type: Timestamp
Required: No

status

The status of a tunnel. Valid values are: Open and Closed.
Type: String
Valid Values: OPEN | CLOSED
Required: No

tunnelArn

The Amazon Resource Name of the tunnel. The tunnel ARN format is
arn:aws:tunnel:<region>:<account-id>:tunnel/<tunnel-id>
Type: String
Required: No

_tunnelId

The unique alpha-numeric identifier for the tunnel.
Type: String
Pattern: [a-zA-Z0-9_\-+=:]\{1,128\}
Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see 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: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

**X-Amz-Date**

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is
not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Handling Dates in Signature Version 4 in the Amazon Web Services General Reference.

Type: string

Required: Conditional

**X-Amz-Security-Token**

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS Security Token Service, go to AWS Services That Work with IAM in the IAM User Guide.

Condition: If you're using temporary security credentials from the AWS Security Token Service, you must include the security token.

Type: string

Required: Conditional

**X-Amz-Signature**

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

**X-Amz-SignedHeaders**

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Task 1: Create a Canonical Request For Signature Version 4 in the Amazon Web Services General Reference.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional