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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.

Find the endpoint address for actions in the AWS IoT data plane by running this CLI command:

aws iot describe-endpoint --endpoint-type iot:Data-ATS

The service name used by AWS Signature Version 4 to sign requests is: iotdevicegateway.

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.

Find the endpoint address for actions in the AWS IoT jobs data plane by running this CLI command:

aws iot describe-endpoint --endpoint-type iot:Jobs

The service name used by AWS Signature Version 4 to sign requests is: iotLaserThingJobManagerService.

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

The following actions are supported by AWS IoT:

- AcceptCertificateTransfer (p. 14)
- AddThingToBillingGroup (p. 16)
- AddThingToThingGroup (p. 18)
- AssociateTargetsWithJob (p. 21)
- AttachPolicy (p. 24)
- AttachPrincipalPolicy (p. 26)
- AttachSecurityProfile (p. 28)
- AttachThingPrincipal (p. 30)
- CancelAuditMitigationActionsTask (p. 32)
- CancelAuditTask (p. 34)
- CancelCertificateTransfer (p. 36)
- CancelJob (p. 38)
- CancelJobExecution (p. 41)
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- DeleteV2LoggingLevel (p. 191)
- DeprecateThingType (p. 193)
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The following actions are supported by AWS IoT Data Plane:

DeleteThingShadow (p. 590)
GetThingShadow (p. 593)
ListNamedShadowsForThing (p. 596)
Publish (p. 599)
UpdateThingShadow (p. 601)

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

DescribeJobExecution (p. 604)
- GetPendingJobExecutions (p. 607)
- StartNextPendingJobExecution (p. 610)
- UpdateJobExecution (p. 613)

The following actions are supported by AWS IoT Secure Tunneling:

- CloseTunnel (p. 617)
- DescribeTunnel (p. 619)
- ListTagsForResource (p. 621)
- ListTunnels (p. 623)
- OpenTunnel (p. 625)
- TagResource (p. 628)
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**AWS IoT**

The following actions are supported by AWS IoT:

- AcceptCertificateTransfer (p. 14)
- AddThingToBillingGroup (p. 16)
- AddThingToThingGroup (p. 18)
- AssociateTargetsWithJob (p. 21)
- AttachPolicy (p. 24)
- AttachPrincipalPolicy (p. 26)
- AttachSecurityProfile (p. 28)
- AttachThingPrincipal (p. 30)
- CancelAuditMitigationActionsTask (p. 32)
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- ClearDefaultAuthorizer (p. 44)
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- CreateAuditSuppression (p. 48)
- CreateAuthorizer (p. 51)
- CreateBillingGroup (p. 55)
- CreateCertificateFromCsr (p. 58)
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- CreateDynamicThingGroup (p. 68)
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- CreateKeysAndCertificate (p. 77)
- CreateMitigationAction (p. 80)
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- CreatePolicy (p. 89)
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• DeleteMitigationAction (p. 159)
• DeleteOTAUpdate (p. 161)
• DeletePolicy (p. 163)
• DeletePolicyVersion (p. 165)
• DeleteProvisioningTemplate (p. 167)
• DeleteProvisioningTemplateVersion (p. 169)
• DeleteRegistrationCode (p. 171)
• DeleteRoleAlias (p. 173)
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• DescribeDefaultAuthorizer (p. 221)
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• ListProvisioningTemplateVersions (p. 403)
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• ListStreams (p. 414)
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- UpdateThingGroupsForThing (p. 581)
- UpdateTopicRuleDestination (p. 584)
- ValidateSecurityProfileBehaviors (p. 587)
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. 359) to enumerate your certificates.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

certificateId (p. 14)

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]+

Required: Yes

setAsActive (p. 14)

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: 400

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. 16)**

The ARN of the billing group.

Type: String

Required: No

**billingGroupName (p. 16)**

The name of the billing group.

Type: String


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

Required: No

**thingArn (p. 16)**

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

Type: String

Required: No

**thingName (p. 16)**

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

Type: String

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

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 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
AddThingToThingGroup

Service: AWS IoT

Adds a thing to a thing group.

Request Syntax

```
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. 18)**

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. 18)**

The ARN of the thing to add to a group.

Type: String

Required: No

**thingGroupArn (p. 18)**

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

Type: String

Required: No

**thingGroupName (p. 18)**

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

Type: String


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

th_element{thingName (p. 18)}

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: 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
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 uses the following URI parameters.

jobId (p. 21)

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_-]+

Required: Yes

Request Body

The request accepts the following data in JSON format.

comment (p. 21)

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. 21)

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

Type: Array of strings

Array Members: Minimum number of 1 item.
Length Constraints: Maximum length of 2048.
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. 22)

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

jobArn (p. 22)

An ARN identifying the job.
Type: String

jobId (p. 22)

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: 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
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 uses the following URI parameters.

`policyName` (p. 24)

The name of the policy to attach.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

`target` (p. 24)

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: 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
## 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. 24) instead.

### Request Syntax

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

### URI Request Parameters

The request uses the following URI parameters.

- **policyName (p. 26)**
  - The policy name.
  - **Length Constraints:** Minimum length of 1. Maximum length of 128.
  - **Pattern:** `[\w+=,.@-]+`
  - **Required:** Yes

- **principal (p. 26)**
  - The principal, which can be a certificate ARN (as returned from the CreateCertificate operation) or an Amazon Cognito ID.
  - **Required:** Yes

### 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: 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
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 uses the following URI parameters.

securityProfileName (p. 28)

The security profile that is attached.


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

Required: Yes

securityProfileTargetArn (p. 28)

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

Required: Yes

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

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 400

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 uses the following URI parameters.

**principal (p. 30)**

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

Required: Yes

**thingName (p. 30)**

The name of the thing.


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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```plaintext
HTTP/1.1 200
```

Response Elements

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

Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

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

The specified resource does not exist.

HTTP Status Code: 404
**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503
**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 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
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 uses the following URI parameters.

taskId (p. 32)

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


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

Required: Yes

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: 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
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 uses the following URI parameters.

`taskId` (p. 34)

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

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

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: 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
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. 467) 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 uses the following URI parameters.

**certificateId (p. 36)**

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]+`

Required: Yes

**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: 400
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

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

URI Request Parameters

The request uses the following URI parameters.

force (p. 38)

(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. 38)

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_-]+

Required: Yes

Request Body

The request accepts the following data in JSON format.

comment (p. 38)

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. 38)

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

Type: String
CancelJob

Length Constraints: Maximum length of 128.
Pattern: [\p{Upper}\p{Digit}_]+ 
Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

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

Response Elements

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

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

description (p. 39)

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

jobArn (p. 39)

The job ARN.
Type: String

jobId (p. 39)

The unique identifier you assigned to this job 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
**ServiceUnavailabilityException**

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
CancelJobExecution

Service: AWS IoT

Cancels the execution of a job for a given thing.

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

**force (p. 41)**

(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. 41)**

The ID of the job to be canceled.

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

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

Required: Yes

**thingName (p. 41)**

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


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**expectedVersion (p. 41)**

(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. 41)

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: 400

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: 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
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 uses the following URI parameters.

confirmationToken (p. 46)

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

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

Required: Yes

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

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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
CreateAuditSuppression
Service: AWS IoT

Creates a Device Defender audit suppression.

Request Syntax

```plaintext
POST /audit/suppressions/create HTTP/1.1
Content-type: application/json

{
   "checkName": "string",
   "clientRequestToken": "string",
   "description": "string",
   "expirationDate": number,
   "resourceIdentifier": {
      "account": "string",
      "caCertificateId": "string",
      "clientId": "string",
      "cognitoIdentityPoolId": "string",
      "deviceCertificateId": "string",
      "iamRoleArn": "string",
      "policyVersionIdentifier": {
         "policyName": "string",
         "policyVersionId": "string"
      },
      "roleAliasArn": "string"
   },
   "suppressIndefinitely": boolean
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**checkName (p. 48)**

An audit check name. 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: String

Required: Yes

**clientRequestToken (p. 48)**

The epoch timestamp in seconds at which this suppression expires.

Type: String

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

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

Required: Yes
**description (p. 48)**

The description of the audit suppression.

Type: String

Length Constraints: Maximum length of 1000.

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

Required: No

**expirationDate (p. 48)**

The epoch timestamp in seconds at which this suppression expires.

Type: Timestamp

Required: No

**resourceIdentifier (p. 48)**

Information that identifies the noncompliant resource.

Type: ResourceIdentifier (p. 787) object

Required: Yes

**suppressIndefinitely (p. 48)**

Indicates whether a suppression should exist indefinitely or not.

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

**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: 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
CreateAuthorizer
Service: AWS IoT

Creates an authorizer.

Request Syntax

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

{
    "authorizerFunctionArn": "string",
    "signingDisabled": boolean,
    "status": "string",
    "tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ],
    "tokenKeyName": "string",
    "tokenSigningPublicKeys": {
        "string": "string"
    }
}
```

URI Request Parameters

The request uses the following URI parameters.

`authorizerName (p. 51)`

The authorizer name.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

`authorizerFunctionArn (p. 51)`

The ARN of the authorizer's Lambda function.

Type: String

Required: Yes

`signingDisabled (p. 51)`

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

Type: Boolean

Required: No
status (p. 51)

The status of the create authorizer request.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

tags (p. 51)

Metadata which can be used to manage the custom authorizer.

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. 815) objects

Required: No

tokenKeyName (p. 51)

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

Type: String


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

Required: No

tokenSigningPublicKeys (p. 51)

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. 52)**
- The authorizer ARN.
- Type: String

**authorizerName (p. 52)**
- 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: 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
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 uses the following URI parameters.

billingGroupName (p. 55)
The name you wish to give to the billing group.
Pattern: [a-zA-Z0-9_: -]+
Required: Yes

Request Body

The request accepts the following data in JSON format.

billingGroupProperties (p. 55)
The properties of the billing group.
Type: BillingGroupProperties (p. 685) object
Required: No
tags (p. 55)
Metadata which can be used to manage the billing group.
Type: Array of Tag (p. 815) objects
Required: No

Response Syntax

HTTP/1.1 200
CreateBillingGroup

Content-type: application/json

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

**Response Elements**

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

**billingGroupArn (p. 55)**

The ARN of the billing group.

Type: String

**billingGroupId (p. 55)**

The ID of the billing group.

Type: String


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

**billingGroupName (p. 55)**

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: 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
CreateCertificateFromCsr

Service: AWS IoT

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

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

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

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

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

On Linux and OS X, the command is:

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

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

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

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

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

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

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

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

**Request Syntax**

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

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

**URI Request Parameters**

The request uses the following URI parameters.

**setAsActive (p. 58)**

Specifies whether the certificate is active.
Request Body

The request accepts the following data in JSON format.

certificateSigningRequest (p. 58)

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. 59)

The Amazon Resource Name (ARN) of the certificate. You can use the ARN as a principal for policy operations.
Type: String
certificatedId (p. 59)

The ID of the certificate. Certificate management operations only take a certificatedId.
Type: String
Length Constraints: Fixed length of 64.
Pattern: (0x)?[a-fA-F0-9]+
certificatePem (p. 59)

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: 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
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

```
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 uses the following URI parameters.

name (p. 61)

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:_-]+

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientRequestToken (p. 61)

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. 61)

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

tags (p. 61)

Metadata that can be used to manage the dimension.

Type: Array of Tag (p. 815) objects

Required: No

type (p. 61)

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

```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. 62)

The ARN (Amazon resource name) of the created dimension.

Type: String

dimension name (p. 62)

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

**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: 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
CreateDomainConfiguration

Service: AWS IoT

Creates a domain configuration.

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

**Request Syntax**

```
POST /domainConfigurations/domainConfigurationName HTTP/1.1
Content-type: application/json

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

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

domainConfigurationName (p. 64)
The name of the domain configuration. This value must be unique to a region.
Pattern: [\w.-]+
Required: Yes

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

authorizerConfig (p. 64)
An object that specifies the authorization service for a domain.
Type: AuthorizerConfig (p. 669) object
Required: No
domainName (p. 64)
The name of the domain.
Type: String

Required: No

serverCertificateArns (p. 64)

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. 64)

The type of service delivered by the endpoint.

**Note**

AWS IoT Core currently supports only the DATA service type.

Type: String

Valid Values: DATA | CREDENTIAL_PROVIDER | JOBS

Required: No

tags (p. 64)

Metadata which can be used to manage the domain configuration.

**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. 815) objects

Required: No

validationCertificateArn (p. 64)

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**

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. 65)

  The ARN of the domain configuration.
  Type: String
domainConfigurationName (p. 65)

  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: 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
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 uses the following URI parameters.

**thingGroupName (p. 68)**

The dynamic thing group name to create.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**indexName (p. 68)**

The dynamic thing group index name.

**Note**

Currently one index is supported: "AWS_Things".

Type: String

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

Required: No

**queryString (p. 68)**

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. 68)**

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. 68)**

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

Type: Array of **Tag (p. 815) objects**

Required: No

**thingGroupProperties (p. 68)**

The dynamic thing group properties.

Type: **ThingGroupProperties (p. 828) object**

Required: No

**Response Syntax**

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

{
  "indexName": "string",
  "queryString": "string",
  "queryVersion": "string",
  "thingGroupArn": "string",
  "thingGroupId": "string",
  "thingGroupName": "string"
}
```

**Response Elements**

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

The following data is returned in JSON format by the service.
**indexName (p. 69)**

The dynamic thing group index name.

Type: String


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

**queryString (p. 69)**

The dynamic thing group search query string.

Type: String

Length Constraints: Minimum length of 1.

**queryVersion (p. 69)**

The dynamic thing group query version.

Type: String

**thingGroupArn (p. 69)**

The dynamic thing group ARN.

Type: String

**thingGroupId (p. 69)**

The dynamic thing group ID.

Type: String


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

**thingGroupName (p. 69)**

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: 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
CreateJob

Service: AWS IoT

Creates a job.

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

**jobId (p. 72)**

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-\_]+
Required: Yes

Request Body

The request accepts the following data in JSON format.

**abortConfig (p. 72)**

Allows you to create criteria to abort a job.

Type: AbortConfig (p. 641) object

Required: No

**description (p. 72)**

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

Required: No

**document (p. 72)**

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. 72)**

An S3 link to the job document.

Type: String


Required: No

**jobExecutionsRolloutConfig (p. 72)**

Allows you to create a staged rollout of the job.

Type: JobExecutionsRolloutConfig (p. 737) object

Required: No
presignedUrlConfig (p. 72)

Configuration information for pre-signed S3 URLs.

Type: PresignedUrlConfig (p. 773) object

Required: No
tag tags (p. 72)

Metadata which can be used to manage the job.

Type: Array of Tag (p. 815) objects

Required: No
targets (p. 72)

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.

Length Constraints: Maximum length of 2048.

Required: Yes
targetSelection (p. 72)

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. 72)

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. 834) 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. 74)

The job description.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [\p{C}]+

jobArn (p. 74)

The job ARN.

Type: String

jobId (p. 74)

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: 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
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 uses the following URI parameters.

setAsActive (p. 77)
- 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. 77)
- The ARN of the certificate.
  Type: String
certificateId (p. 77)
- The ID of the certificate. AWS IoT issues a default subject name for the certificate (for example, AWS IoT Certificate).
CreateKeysAndCertificate

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

**certificatePem (p. 77)**
The certificate data, in PEM format.
Type: String

**keyPair (p. 77)**
The generated key pair.
Type: KeyPair (p. 747) 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: 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
CreateMitigationAction

Service: AWS IoT

Defines an action that can be applied to audit findings by using StartAuditMitigationActionsTask. Only certain types of mitigation actions can be applied to specific check names. For more information, see Mitigation actions. Each mitigation action can apply only one type of change.

Request Syntax

```plaintext
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 uses the following URI parameters.

**actionName (p. 80)**

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-_]+

Required: Yes
Request Body

The request accepts the following data in JSON format.

actionParams (p. 80)

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

Type: MitigationActionParams (p. 758) object

Required: Yes

tags (p. 80)

Metadata that can be used to manage the mitigation action.

Type: Array of Tag (p. 815) objects

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. 81)

The ARN for the new mitigation action.

Type: String

actionId (p. 81)

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: 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
CreateOTAUpdate

Service: AWS IoT

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

Request Syntax

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

{
   "additionalParameters": {
      "string": "string"
   },
   "awsJobAbortConfig": {
      "abortCriteriaList": [
         {
            "action": "string",
            "failureType": "string",
            "minNumberOfExecutedThings": number,
            "thresholdPercentage": number
         }
      ]
   },
   "awsJobExecutionsRolloutConfig": {
      "exponentialRate": {
         "baseRatePerMinute": number,
         "incrementFactor": number,
         "rateIncreaseCriteria": {
            "numberOfNotifiedThings": number,
            "numberOfSucceededThings": number
         }
      },
      "maximumPerMinute": number
   },
   "awsJobPresignedUrlConfig": {
      "expiresInSec": number
   },
   "awsJobTimeoutConfig": {
      "inProgressTimeoutInMinutes": number
   },
   "description": "string",
   "files": [
      {
         "attributes": {
            "string": "string"
         },
         "codeSigning": {
            "awsSignerJobId": "string",
            "customCodeSigning": {
               "certificateChain": {
                  "certificateName": "string",
                  "inlineDocument": "string"
               },
               "hashAlgorithm": "string",
               "signature": {
                  "inlineDocument": blob
               },
               "signatureAlgorithm": "string"
            },
            "startSigningJobParameter": {
               "destination": {
                  "s3Destination": {
                  }
               }
            }
         }
      }
   }
}
```
"bucket": "string",
"prefix": "string"
},
"signingProfileName": "string",
"signingProfileParameter": {
"certificateArn": "string",
"certificatePathOnDevice": "string",
"platform": "string"
}
},
"fileLocation": {
"s3Location": {
"bucket": "string",
"key": "string",
"version": "string"
},
"stream": {
"fileId": number,
"streamId": "string"
}
},
"fileName": "string",
"fileVersion": "string"
],
"protocols": [ "string" ],
"roleArn": "string",
"tags": {
"Key": "string",
"Value": "string"
}
],
"targets": [ "string" ],
"targetSelection": "string"
}

URI Request Parameters

The request uses the following URI parameters.

\textbf{otaUpdateId (p. 83)}

The ID of the OTA update to be created.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

\textbf{additionalParameters (p. 83)}

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

Type: String to string map
awsJobAbortConfig (p. 83)

The criteria that determine when and how a job abort takes place.

Type: AwsJobAbortConfig (p. 674) object

Required: No

awsJobExecutionsRolloutConfig (p. 83)

Configuration for the rollout of OTA updates.

Type: AwsJobExecutionsRolloutConfig (p. 676) object

Required: No

awsJobPresignedUrlConfig (p. 83)

Configuration information for pre-signed URLs.

Type: AwsJobPresignedUrlConfig (p. 678) object

Required: No

awsJobTimeoutConfig (p. 83)

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: AwsJobTimeoutConfig (p. 680) object

Required: No

description (p. 83)

The description of the OTA update.

Type: String

Length Constraints: Maximum length of 2028.

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

Required: No

files (p. 83)

The files to be streamed by the OTA update.

Type: Array of OTAUpdateFile (p. 762) objects

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

Required: Yes

protocols (p. 83)

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
CreateOTAUpdate

Required: No

roleArn (p. 83)

The IAM role that grants AWS IoT access to the Amazon S3, AWS IoT jobs and AWS Code Signing resources to create an OTA update job.

Type: String


Required: Yes
tags (p. 83)

Metadata which can be used to manage updates.

Type: Array of Tag (p. 815) objects

Required: No
targets (p. 83)

The devices targeted to receive OTA updates.

Type: Array of strings

Array Members: Minimum number of 1 item.

Required: Yes
targetSelection (p. 83)

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. 86)**

The AWS IoT job ARN associated with the OTA update.

Type: String

**awsIotJobId (p. 86)**

The AWS IoT job ID associated with the OTA update.

Type: String

**otaUpdateArn (p. 86)**

The OTA update ARN.

Type: String

**otaUpdatedId (p. 86)**

The OTA update ID.

Type: String


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

**otaUpdateStatus (p. 86)**

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: 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
CreatePolicy

Service: AWS IoT

Creates an AWS IoT policy.

The created policy is the default version for the policy. This operation creates a policy version with a version identifier of 1 and sets 1 as the policy's default version.

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

**policyName (p. 89)**

The policy name.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**policyDocument (p. 89)**

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

**tags (p. 89)**

Metadata which can be used to manage the policy.

**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..."
CreatePolicy

Type: Array of Tag (p. 815) objects

Required: No

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. 90)**

The policy ARN.

Type: String

**policyDocument (p. 90)**

The JSON document that describes the policy.

Type: String

**policyName (p. 90)**

The policy name.

Type: String


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

**policyVersionId (p. 90)**

The policy version ID.

Type: String

Pattern: [0-9]+
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: 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
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. 165) to delete an existing version before you create a new one.

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

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

policyName (p. 92)

The policy name.


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

Required: Yes

setAsDefault (p. 92)

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. 92)

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
```
CreatePolicyVersion

```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. 92)**

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

**policyArn (p. 92)**

- The policy ARN.
- Type: String

**policyDocument (p. 92)**

- The JSON document that describes the policy.
- Type: String

**policyVersionId (p. 92)**

- 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: 400
_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
CreateProvisioningClaim

Service: AWS IoT

Creates a provisioning claim.

Request Syntax

POST /provisioning-templates/{TemplateName}/provisioning-claim HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

```
TemplateName (p. 95)
```

The name of the provisioning template to use.


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

Required: Yes

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. 95)
```

The ID of the certificate.

Type: String

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

**certificatePem (p. 95)**  
The provisioning claim certificate.  
Type: String  

**expiration (p. 95)**  
The provisioning claim expiration time.  
Type: Timestamp

**keyPair (p. 95)**  
The provisioning claim key pair.  
Type: KeyPair (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: 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
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,
    "preProvisioningHook": {
        "payloadVersion": "string",
        "targetArn": "string"
    },
    "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. 98)**

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. 98)**

True to enable the fleet provisioning template, otherwise false.

Type: Boolean

Required: No

**preProvisioningHook (p. 98)**

Creates a pre-provisioning hook template.

Type: ProvisioningHook (p. 774) object
CreateProvisioningTemplate

Required: No

provisioningRoleArn (p. 98)

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. 98)

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. 815) objects

Required: No
templateBody (p. 98)

The JSON formatted contents of the fleet provisioning template.

Type: String

Required: Yes
templateName (p. 98)

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. 99)**
The default version of the fleet provisioning template.
Type: Integer

**templateArn (p. 99)**
The ARN that identifies the provisioning template.
Type: String

**templateName (p. 99)**
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: 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
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 uses the following URI parameters.

**setAsDefault (p. 102)**

Sets a fleet provision template version as the default version.

**templateName (p. 102)**

The name of the fleet provisioning template.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**templateBody (p. 102)**

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. 102)**

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

Type: Boolean

**templateArn (p. 102)**

The ARN that identifies the provisioning template.

Type: String

**templateName (p. 102)**

The name of the fleet provisioning template.

Type: String


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

**versionId (p. 102)**

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: 400

UnauthorizedException

You are not authorized to perform this operation.

HTTP Status Code: 401

VersionsLimitExceeded Exception

The number of policy versions exceeds the limit.

HTTP Status Code: 409

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby 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",
    "tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ]
}
```

URI Request Parameters

The request uses the following URI parameters.

**roleAlias (p. 105)**

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


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**credentialDurationSeconds (p. 105)**

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

Type: Integer


Required: No

**roleArn (p. 105)**

The role ARN.

Type: String


Required: Yes
tags (p. 105)

Metadata which can be used to manage the role alias.

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. 815) objects

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/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. 106)

The role alias.

Type: String


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

roleAliasArn (p. 106)

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: 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
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 uses the following URI parameters.

**scheduledAuditName** (p. 108)

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


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**dayOfMonth** (p. 108)

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


Required: No

**dayOfWeek** (p. 108)

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".
AWS IoT API Reference
CreateScheduledAudit

**Type:** String

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

**Required:** No

**frequency (p. 108)**

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. 108)**

Metadata that can be used to manage the scheduled audit.

**Type:** Array of Tag (p. 815) objects

**Required:** No

**targetCheckNames (p. 108)**

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**

```
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. 109)**

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: 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
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 uses the following URI parameters.

securityProfileName (p. 111)

The name you are giving to the security profile.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

additionalMetricsToRetain (p. 111)

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. 112) instead.

Type: Array of strings

Required: No

additionalMetricsToRetainV2 (p. 111)

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. 754) objects

Required: No

alertTargets (p. 111)

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. 649) object map

Valid Keys: SNS

Required: No

behaviors (p. 111)

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

Type: Array of Behavior (p. 681) objects

Array Members: Maximum number of 100 items.

Required: No

securityProfileDescription (p. 111)

A description of the security profile.
Type: String
Length Constraints: Maximum length of 1000.
Pattern: [\p{Graph}\x20]*
Required: No
tags (p. 111)
Metadata that can be used to manage the security profile.
Type: Array of Tag (p. 815) 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. 113)
The ARN of the security profile.
Type: String

securityProfileName (p. 113)
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: 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
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 uses the following URI parameters.

streamId (p. 115)

The stream ID.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

description (p. 115)

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.
Pattern: \[\^[^p\{C}\]+\]
Required: No
files (p. 115)
The files to stream.
Type: Array of StreamFile (p. 811) objects
Array Members: Minimum number of 1 item. Maximum number of 50 items.
Required: Yes
roleArn (p. 115)
An IAM role that allows the IoT service principal assumes to access your S3 files.
Type: String
Required: Yes
tags (p. 115)
Metadata which can be used to manage streams.
Type: Array of Tag (p. 815) 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. 116)
A description of the stream.
Type: String
Length Constraints: Maximum length of 2028.
Pattern: \[\^[^p\{C}\]+\]
streamArn (p. 116)
The stream ARN.
CreateStream

Type: String

**streamId (p. 116)**

The stream ID.

Type: String


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

**streamVersion (p. 116)**

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

**LimitExceededError**

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: 400

**UnauthorizedException**

You are not authorized to perform this operation.
See Also

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

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

```plaintext
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 uses the following URI parameters.

thingName (p. 119)
The name of the thing to create.

You can't change a thing's name after you create it. To change a thing's name, you must create a new thing, give it the new name, and then delete the old thing.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

attributePayload (p. 119)
The attribute payload, which consists of up to three name/value pairs in a JSON document. For example:

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

Type: AttributePayload (p. 654) object

Required: No
**billingGroupName (p. 119)**

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

Type: String


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

Required: No

**thingTypeName (p. 119)**

The name of the thing type associated with the new thing.

Type: String


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

Required: No

**Response Syntax**

```plaintext
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. 120)**

The ARN of the new thing.

Type: String

**thingId (p. 120)**

The thing ID.

Type: String

**thingName (p. 120)**

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: 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
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 uses the following URI parameters.

**thingGroupName (p. 122)**

The thing group name to create.


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

Required: Yes

**Request Body**

The request accepts the following data in JSON format.

**parentGroupName (p. 122)**

The name of the parent thing group.

Type: String

AWS IoT API Reference

CreateThingGroup

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

Required: No
tags (p. 122)

Metadata which can be used to manage the thing group.

Type: Array of Tag (p. 815) objects

Required: No

thingGroupProperties (p. 122)

The thing group properties.

Type: ThingGroupProperties (p. 828) 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. 123)

The thing group ARN.

Type: String

thingGroupId (p. 123)

The thing group ID.

Type: String


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

thingGroupName (p. 123)

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: 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
CreateThingType

Service: AWS IoT

Creates a new thing type.

Request Syntax

```plaintext
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 uses the following URI parameters.

thingTypeName (p. 125)

The name of the thing type.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

tags (p. 125)

Metadata which can be used to manage the thing type.

Type: Array of Tag (p. 815) objects

Required: No

thingTypeProperties (p. 125)

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. 833) object

Required: No

125
Response Syntax

HTTP/1.1 200
Content-type: application/json

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

Response Elements

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

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

**thingTypeArn (p. 126)**

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

**thingTypeId (p. 126)**

The thing type ID.
Type: String

**thingTypeName (p. 126)**

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: 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
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

```plaintext
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

Syntax:

```
{
  "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

```
{
  "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"
  },
  "timestream": {
    "databaseName": "string",
    "dimensions": [
      {
        "name": "string",
        "value": "string"
      }
    ],
    "roleArn": "string",
    "tableName": "string",
    "timestamp": {
      "unit": "string",
      "value": "string"
    }
  },
  "awsIotSqlVersion": "string",
  "description": "string",
  "errorAction": {
    "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",
      "roleArn": "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": [
    {
      "assetId": "string",
      "entryId": "string",
      "propertyAlias": "string",
      "propertyId": "string",
      "propertyValues": [
        {
          "quality": "string",
          "timestamp": "string"
        }
      ]
    }
  ]
}
"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"
},
"timestream": {
  "databaseName": "string",
  "dimensions": [
    {
      "name": "string",
      "value": "string"
    }
  ],
  "roleArn": "string",
  "tableName": "string",
  "timestamp": {
    "unit": "string",
    "value": "string"
URI Request Parameters

The request uses the following URI parameters.

(ruleName p. 128)

The name of the rule.


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

Required: Yes

tags (p. 128)

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. 128)

The rule payload.

Type: TopicRulePayload (p. 848) 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. 135)

The topic rule destination configuration.

Type: TopicRuleDestinationConfiguration (p. 844) 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. 135)**

The topic rule destination.

Type: *TopicRuleDestination (p. 842) 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

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

URI Request Parameters

The request uses the following URI parameters.

- `deleteScheduledAudits (p. 137)`
  
  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: 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
DeleteAuditSuppression

Service: AWS IoT

Deletes a Device Defender audit suppression.

Request Syntax

POST /audit/suppressions/delete HTTP/1.1
Content-type: application/json

{
  "checkName": "string",
  "resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "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. 139)

An audit check name. 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: String
Required: Yes

resourceIdentifier (p. 139)

Information that identifies the noncompliant resource.

Type: ResourceIdentifier (p. 787) 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

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: 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
DeleteAuthorizer
Service: AWS IoT
Deletes an authorizer.

Request Syntax

```
DELETE /authorizer/authorizerName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

**authorizerName (p. 141)**

The name of the authorizer to delete.
Pattern: `[\w=,@-]+`
Required: Yes

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: 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
# DeleteBillingGroup

**Service:** AWS IoT  

Deletes the billing group.

## Request Syntax

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

## URI Request Parameters

The request uses the following URI parameters.

**billingGroupName (p. 143)**  
The name of the billing group.  
**Length Constraints:** Minimum length of 1. Maximum length of 128.  
**Pattern:** `[a-zA-Z0-9:_-]+`  
**Required:** Yes  

**expectedVersion (p. 143)**  
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: 400

**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 uses the following URI parameters.

`caCertificateId` (p. 145)

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]+`

Required: Yes

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: 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
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. 278) API to detach all policies. Next, use the UpdateCertificate (p. 535) API to set the certificate to the INACTIVE status.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

**certificateId (p. 147)**

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]+

Required: Yes

**forceDelete (p. 147)**

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: 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
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 uses the following URI parameters.

**name (p. 149)**

The unique identifier for the dimension that you want to delete.


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

Required: Yes

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: 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
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 uses the following URI parameters.

**domainConfigurationName (p. 151)**
The name of the domain configuration to be deleted.
Pattern: `[\w.-]`
Required: Yes

**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: 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
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 uses the following URI parameters.

expectedVersion (p. 153)

The expected version of the dynamic thing group to delete.

thingGroupName (p. 153)

The name of the dynamic thing group to delete.


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

Required: Yes

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: 400

**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_PROGESS". Attempting to delete or cancel a job whose status is already "DELETION_IN_PROGRESS" will result in an error.

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

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

URI Request Parameters
The request uses the following URI parameters.

force (p. 155)
(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. 155)
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-_.]*
Required: Yes

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: 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
DeleteJobExecution

Service: AWS IoT

Deletes a job execution.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

- **executionNumber (p. 157)**
  
  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.

  Required: Yes

- **force (p. 157)**
  
  (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. 157)**
  
  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-]`+

  Required: Yes

- **thingName (p. 157)**
  
  The name of the thing whose job execution will be deleted.


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

  Required: Yes

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: 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
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 uses the following URI parameters.

- **actionName (p. 159)**
  The name of the mitigation action that you want to delete.
  Length Constraints: Maximum length of 128.
  Pattern: [a-zA-Z0-9_-]+
  Required: Yes

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: 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
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 uses the following URI parameters.

deleteStream (p. 161)
Specifies if the stream associated with an OTA update should be deleted when the OTA update is deleted.

forceDeleteAWSJob (p. 161)
Specifies if the AWS Job associated with the OTA update should be deleted when the OTA update is deleted.

otaUpdateId (p. 161)
The ID of the OTA update to delete.
Pattern: [a-zA-Z0-9_\-]+
Required: Yes

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: 400
**UnauthorizedException**

You are not authorized to perform this operation.

HTTP Status Code: 410
**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 uses the following URI parameters.

**policyName (p. 163)**

The name of the policy to delete.

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

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: 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
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. 163). 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 uses the following URI parameters.

policyName (p. 165)

  The name of the policy.


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

  Required: Yes

policyVersionId (p. 165)

  The policy version ID.

  Pattern: [0-9]+

  Required: Yes

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: 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
DeleteProvisioningTemplate

Service: AWS IoT

Deletes a fleet provisioning template.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

**templateName** (p. 167)

The name of the fleet provision template to delete.

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

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: 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
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 uses the following URI parameters.

templateName (p. 169)

The name of the fleet provisioning template version to delete.


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

Required: Yes

versionId (p. 169)

The fleet provisioning template version ID to delete.

Required: Yes

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: 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
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: 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
DeleteRoleAlias
Service: AWS IoT
Deletes a role alias

Request Syntax
DELETE /role-aliases/roleAlias HTTP/1.1

URI Request Parameters
The request uses the following URI parameters.

roleAlias (p. 173)
The role alias to delete.
Pattern: [\w=,@-]+
Required: Yes

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: 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
DeleteScheduledAudit

Service: AWS IoT

Deletes a scheduled audit.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

scheduledAuditName (p. 175)

- The name of the scheduled audit you want to delete.
- Pattern: `[a-zA-Z0-9-_]+`
- Required: Yes

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: 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
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 uses the following URI parameters.

**expectedVersion (p. 177)**

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. 177)**

The name of the security profile to be deleted.


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

Required: Yes

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: 400

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 uses the following URI parameters.

- **streamId (p. 179)**
  - The stream ID.
  - Pattern: `[a-zA-Z0-9_-]+`
  - Required: Yes

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: 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
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 uses the following URI parameters.

expectedVersion (p. 181)

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. 181)

The name of the thing to delete.


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

Required: Yes

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: 400

**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
DeleteThingGroup

Service: AWS IoT

Deletes a thing group.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

- **expectedVersion (p. 183)**
  - The expected version of the thing group to delete.
- **thingGroupName (p. 183)**
  - The name of the thing group to delete.
  - Pattern: `[a-zA-Z0-9:_-]+`
  - Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```plaintext
HTTP/1.1 200
```

Response Elements

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

Errors

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

**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. 193), then remove any associated things by calling UpdateThing (p. 575) to change the thing type on any associated thing, and finally use DeleteThingType (p. 185) to delete the thing type.

Request Syntax

DELETE /thing-types/thingTypeName HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

thingTypeName (p. 185)

The name of the thing type.


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

Required: Yes

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: 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
DeleteTopicRule
Service: AWS IoT
Deletes the rule.

Request Syntax

DELETE /rules/ruleName HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

ruleName (p. 187)
   The name of the rule.
   Pattern: ^[a-zA-Z0-9_]+$
   Required: Yes

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 uses the following URI parameters.

arn (p. 189)

The ARN of the topic rule destination to delete.

Required: Yes

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

InternalServerError

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 uses the following URI parameters.

targetName (p. 191)
The name of the resource for which you are configuring logging.
Required: Yes

targetType (p. 191)
The type of resource for which you are configuring logging. Must be THING_GROUP.
Valid Values: DEFAULT | THING_GROUP
Required: Yes

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 uses the following URI parameters.

thingTypeName (p. 193)
The name of the thing type to deprecate.
Pattern: [a-zA-Z0-9:_-]+
Required: Yes

Request Body

The request accepts the following data in JSON format.

undoDeprecate (p. 193)
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: 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
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. 195)

Which audit checks are enabled and disabled for this account.

Type: String to AuditCheckConfiguration object map

auditNotificationTargetConfigurations (p. 195)

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

Type: String to AuditNotificationTarget object map

Valid Keys: SNS
roleArn (p. 195)

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: 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
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 uses the following URI parameters.

**findingId (p. 197)**

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-_]+

Required: Yes

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,
    "isSuppressed": boolean,
    "nonCompliantResource": {
      "additionalInfo": {
        "string": "string"
      }
    },
    "resourceIdentifier": {
      "account": "string",
      "caCertificateId": "string",
      "clientId": "string",
      "cognitoIdentityPoolId": "string",
      "deviceCertificateId": "string",
      "iamRoleArn": "string",
      "policyVersionIdentifier": {
        "policyName": "string",
        "policyVersionId": "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.

**finding (p. 197)**

The findings (results) of the audit.

Type: `AuditFinding (p. 658)` 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: 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
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 uses the following URI parameters.

taskId (p. 200)

The unique identifier for the audit mitigation task.


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

Required: Yes

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"
            }
         }
      }
   ]
}
```

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.

actionsDefinition (p. 200)

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

Type: Array of MitigationAction (p. 756) objects

auditCheckToActionsMapping (p. 200)

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. 200)

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

Type: Timestamp

startTime (p. 200)

The date and time when the task was started.

Type: Timestamp
target (p. 200)

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. 663) object

taskStatistics (p. 200)

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. 818) object map

taskStatus (p. 200)

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: 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
DescribeAuditSuppression

Service: AWS IoT

Gets information about a Device Defender audit suppression.

Request Syntax

POST /audit/suppressions/describe HTTP/1.1
Content-type: application/json

{
  "checkName": "string",
  "resourceIdentifier": {
    "account": "string",
    "caCertificateId": "string",
    "clientId": "string",
    "cognitoIdentityPoolId": "string",
    "deviceCertificateId": "string",
    "iamRoleArn": "string",
    "policyVersionIdentifier": {
      "policyName": "string",
      "policyVersionId": "string"
    },
    "roleAliasArn": "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. 204)

An audit check name. 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: String

Required: Yes

resourceIdentifier (p. 204)

Information that identifies the noncompliant resource.

Type: ResourceIdentifier (p. 787) object

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "checkName": "string",
    "description": "string",
    "expirationDate": number,
    "resourceIdentifier": {
        "account": "string",
        "cACertificateId": "string",
        "clientId": "string",
        "cognitoIdentityPoolId": "string",
        "deviceCertificateId": "string",
        "iamRoleArn": "string",
        "policyVersionIdentifier": {
            "policyName": "string",
            "policyVersionId": "string"
        },
        "roleAliasArn": "string"
    },
    "suppressIndefinitely": boolean
}

Response Elements

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

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

checkName (p. 204)

An audit check name. 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: String
description (p. 204)

The description of the audit suppression.

Type: String

Length Constraints: Maximum length of 1000.

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

expirationDate (p. 204)

The epoch timestamp in seconds at which this suppression expires.

Type: Timestamp

resourceIdentifier (p. 204)

Information that identifies the noncompliant resource.

Type: ResourceIdentifier (p. 787) object

suppressIndefinitely (p. 204)

Indicates whether a suppression should exist indefinitely or not.

Type: Boolean
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: 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
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 uses the following URI parameters.

taskId (p. 207)

The ID of the audit whose information you want to get.


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

Required: Yes

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,
      "suppressedNonCompliantResourcesCount": 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. 207)**

Detailed information about each check performed during this audit.

Type: String to AuditCheckDetails (p. 656) object map

**scheduledAuditName (p. 207)**

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

Type: String


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

**taskStartTime (p. 207)**

The time the audit started.

Type: Timestamp

**taskStatistics (p. 207)**

Statistical information about the audit.

Type: TaskStatistics (p. 816) object

**taskStatus (p. 207)**

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

Type: String

Valid Values: IN_PROGRESS | COMPLETED | FAILED | CANCELED

**taskType (p. 207)**

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: 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
DescribeAuthorizer

Service: AWS IoT

Describes an authorizer.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

`authorizerName (p. 210)`

The name of the authorizer to describe.


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

Required: Yes

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. 210)`

The authorizer description.
Type: AuthorizerDescription (p. 670) 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: 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
DescribeBillingGroup

Service: AWS IoT

Returns information about a billing group.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

**billingGroupName (p. 212)**

The name of the billing group.


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

Required: Yes

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. 212)**

The ARN of the billing group.

Type: String
**billingGroupId (p. 212)**

The ID of the billing group.

Type: String


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

**billingGroupMetadata (p. 212)**

Additional information about the billing group.

Type: `BillingGroupMetadata (p. 684)` object

**billingGroupName (p. 212)**

The name of the billing group.

Type: String


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

**billingGroupProperties (p. 212)**

The properties of the billing group.

Type: `BillingGroupProperties (p. 685)` object

**version (p. 212)**

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: 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
DescribeCACertificate

Service: AWS IoT

Describes a registered CA certificate.

Request Syntax

```
GET /cacertificate/caCertificateId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

**caCertificateId (p. 215)**

The CA certificate identifier.

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

Request Body

The request does not have a request body.

Response Syntax

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

{
   "certificateDescription": {
      "autoRegistrationStatus": "string",
      "certificateArn": "string",
      "certificateId": "string",
      "certificatePem": "string",
      "creationDate": number,
      "customerVersion": number,
      "generationId": "string",
      "lastModifiedDate": number,
      "ownedBy": "string",
      "status": "string",
      "validity": {
         "notAfter": number,
         "notBefore": number
      }
   },
   "registrationConfig": {
      "roleArn": "string",
      "templateBody": "string"
   }
}
```

Response Elements

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

**certificateDescription (p. 215)**

The CA certificate description.

Type: CACertificateDescription (p. 687) object

**registrationConfig (p. 215)**

Information about the registration configuration.

Type: RegistrationConfig (p. 783) 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: 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
DescribeCertificate
Service: AWS IoT

Gets information about the specified certificate.

Request Syntax

```
GET /certificates/certificateId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

certificateId (p. 218)

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]+

Required: Yes

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",
    "certificateMode": "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. 218)

The description of the certificate.

Type: CertificateDescription (p. 691) 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: 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
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. 221)

The default authorizer's description.

Type: AuthorizerDescription (p. 670) 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: 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
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 uses the following URI parameters.

name (p. 223)
The unique identifier for the dimension.
Pattern: [a-zA-Z0-9:_-]+
Required: Yes

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. 223)
The ARN (Amazon resource name) for the dimension.
Type: String

creationDate (p. 223)
The date the dimension was created.
Type: Timestamp
lastModifiedDate (p. 223)

The date the dimension was last modified.
Type: Timestamp

name (p. 223)

The unique identifier for the dimension.
Type: String
Pattern: [a-zA-Z0-9:_-]+

stringValues (p. 223)

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. 223)

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: 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
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 uses the following URI parameters.

domainConfigurationName (p. 226)
The name of the domain configuration.
Pattern: [\w.:-]+  
Required: Yes

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. 226)**

An object that specifies the authorization service for a domain.

Type: AuthorizerConfig (p. 669) object

**domainConfigurationArn (p. 226)**

The ARN of the domain configuration.

Type: String

**domainConfigurationName (p. 226)**

The name of the domain configuration.

Type: String


Pattern: [\w.:-]+

**domainConfigurationStatus (p. 226)**

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

Type: String

Valid Values: ENABLED | DISABLED

**domainName (p. 226)**

The name of the domain.

Type: String


**domainType (p. 226)**

The type of the domain.

Type: String

Valid Values: ENDPOINT | AWS_MANAGED | CUSTOMER_MANAGED

**serverCertificates (p. 226)**

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

Type: Array of ServerCertificateSummary (p. 800) objects

**serviceType (p. 226)**

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
**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: 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
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 uses the following URI parameters.

endpointType (p. 229)

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. 229)

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: 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
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. 231)

  The creation date of the event configuration.

  Type: Timestamp

eventConfigurations (p. 231)

  The event configurations.

  Type: String to Configuration (p. 702) 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. 231)

  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: 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
DescribeIndex
Service: AWS IoT

Describes a search index.

Request Syntax

GET /indices/indexName HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

indexName (p. 233)

The index name.
Pattern: [a-zA-Z0-9:_-]+
Required: Yes

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. 233)

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

indexStatus (p. 233)

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: 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
DescribeJob
Service: AWS IoT
Describes a job.

Request Syntax
GET /jobs/jobId HTTP/1.1

URI Request Parameters
The request uses the following URI parameters.

jobId (p. 236)
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-_]+
Required: Yes

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  }  }  }}}
Response Elements

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. 236)

An S3 link to the job document.

Type: String


job (p. 236)

Information about the job.

Type: Job (p. 732) 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: 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
DescribeJobExecution

Service: AWS IoT

Describes a job execution.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

executionNumber (p. 239)

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

jobId (p. 239)

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-_:]+

Required: Yes

thingName (p. 239)

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


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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

```json
{
  "execution": {
    "approximateSecondsBeforeTimedOut": number,
    "executionNumber": number,
    "forceCanceled": boolean,
    "jobId": "string",
    "lastUpdatedAt": number,
    "queuedAt": number,
    "startedAt": number,
    "status": "string",
    "statusDetails": {
```
Response Elements

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. 239)**

Information about the job execution.

Type: JobExecution (p. 735) 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: 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
DescribeMitigationAction

Service: AWS IoT

Gets information about a mitigation action.

Request Syntax

GET /mitigationactions/actions/actionName HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

**actionName (p. 242)**

The friendly name that uniquely identifies the mitigation action.

Length Constraints: Maximum length of 128.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

```json
{
   "actionArn": "string",
   "actionId": "string",
   "actionName": "string",
   "actionParams": {
      "addThingsToThingGroupParams": {
         "overrideDynamicGroups": boolean,
         "thingGroupNames": [ "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. 242)**

The ARN that identifies this migration action.

Type: String

**actionId (p. 242)**

A unique identifier for this action.

Type: String

**actionName (p. 242)**

The friendly name that uniquely identifies the mitigation action.

Type: String

Length Constraints: Maximum length of 128.

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

**actionParams (p. 242)**

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

Type: MitigationActionParams (p. 758) object

**actionType (p. 242)**

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. 242)**

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

Type: Timestamp

**lastModifiedDate (p. 242)**

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

Type: Timestamp

**roleArn (p. 242)**

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: 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
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 uses the following URI parameters.

**templateName (p. 245)**

The name of the fleet provisioning template.


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

Required: Yes

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,
  "preProvisioningHook": {
    "payloadVersion": "string",
    "targetArn": "string"
  },
  "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. 245)**

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

**defaultVersionId (p. 245)**

The default fleet template version ID.

Type: Integer

**description (p. 245)**

The description of the fleet provisioning template.

Type: String

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

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

**enabled (p. 245)**

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

Type: Boolean

**lastModifiedDate (p. 245)**

The date when the fleet provisioning template was last modified.

Type: Timestamp

**preProvisioningHook (p. 245)**

Gets information about a pre-provisioned hook.

Type: `ProvisioningHook (p. 774)` object

**provisioningRoleArn (p. 245)**

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

Type: String


**templateArn (p. 245)**

The ARN of the fleet provisioning template.

Type: String

**templateBody (p. 245)**

The JSON formatted contents of the fleet provisioning template.

Type: String

**templateName (p. 245)**

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: 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
DescribeProvisioningTemplateVersion

Service: AWS IoT

Returns information about a fleet provisioning template version.

Request Syntax

GET /provisioning-templates/{TemplateName}/versions/{VersionId} HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

TemplateName (p. 248)

The template name.


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

Required: Yes

VersionId (p. 248)

The fleet provisioning template version ID.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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. 248)

The date when the fleet provisioning template version was created.

Type: Timestamp

248
**isDefaultVersion (p. 248)**

True if the fleet provisioning template version is the default version.

Type: Boolean

**templateBody (p. 248)**

The JSON formatted contents of the fleet provisioning template version.

Type: String

**versionId (p. 248)**

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: 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
DescribeRoleAlias

Service: AWS IoT

Describes a role alias.

Request Syntax

GET /role-aliases/roleAlias HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

roleAlias (p. 251)

The role alias to describe.


Pattern: [\w=,@-]+

Required: Yes

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. 251)

The role alias description.

Type: RoleAliasDescription (p. 789) 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: 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
DescribeScheduledAudit

Service: AWS IoT

Gets information about a scheduled audit.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

scheduledAuditName (p. 253)

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


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

Required: Yes

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. 253)

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]|1[2-9]|3[01])$|^LAST$
**dayOfWeek (p. 253)**

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. 253)**

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. 253)**

The ARN of the scheduled audit.

Type: String

**scheduledAuditName (p. 253)**

The name of the scheduled audit.

Type: String


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

**targetCheckNames (p. 253)**

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: 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
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 uses the following URI parameters.

securityProfileName (p. 256)

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


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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "additionalMetricsToRetain": [ "string" ],
  "additionalMetricsToRetainV2": [ 
    
  },
  "alertTargets": {
    "string" : {
      "alertTargetArn": "string",
      "roleArn": "string"
    }
  },
  "behaviors": [ 
    
  ]
}
```

Response Elements

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. 256)**

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. 257)` instead.

Type: Array of strings

**additionalMetricsToRetainV2 (p. 256)**

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. 754)` objects

**alertTargets (p. 256)**

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

Type: String to `AlertTarget (p. 649)` object map

Valid Keys: `SNS`

**behaviors (p. 256)**

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

Type: Array of `Behavior (p. 681)` objects

Array Members: Maximum number of 100 items.

**creationDate (p. 256)**

The time the security profile was created.
Type: Timestamp

**lastModifiedDate (p. 256)**

The time the security profile was last modified.

Type: Timestamp

**securityProfileArn (p. 256)**

The ARN of the security profile.

Type: String

**securityProfileDescription (p. 256)**

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. 256)**

The name of the security profile.

Type: String


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

**version (p. 256)**

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: 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
**DescribeStream**

Service: AWS IoT

Gets information about a stream.

**Request Syntax**

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

**URI Request Parameters**

The request uses the following URI parameters.

**streamId (p. 260)**

The stream ID.


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

Required: Yes

**Request Body**

The request does not have a request body.

**Response Syntax**

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

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

**Response Elements**

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

**streamInfo (p. 260)**

Information about the stream.

Type: StreamInfo (p. 812) 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: 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
DescribeThing

Service: AWS IoT

Gets information about the specified thing.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

**thingName (p. 263)**

The name of the thing.


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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

```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. 263)**

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. 263)`

The name of the billing group the thing belongs to.

Type: String


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

`defaultClientId (p. 263)`

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. 263)`

The ARN of the thing to describe.

Type: String

`thingId (p. 263)`

The ID of the thing to describe.

Type: String

`thingName (p. 263)`

The name of the thing.

Type: String


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

`thingTypeName (p. 263)`

The thing type name.

Type: String


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

Service: AWS IoT

Describe a thing group.

Request Syntax

GET /thing-groups/thingGroupName HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

thingGroupName (p. 266)

The name of the thing group.


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

Required: Yes

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"
  }
}
Response Elements

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. 266)**

The dynamic thing group index name.

Type: String


Pattern: \[a-zA-Z0-9\-\_\-]+**queryString (p. 266)**

The dynamic thing group search query string.

Type: String

Length Constraints: Minimum length of 1.

**queryVersion (p. 266)**

The dynamic thing group query version.

Type: String

**status (p. 266)**

The dynamic thing group status.

Type: String

Valid Values: ACTIVE | BUILDING | REBUILDING

**thingGroupArn (p. 266)**

The thing group ARN.

Type: String

**thingGroupId (p. 266)**

The thing group ID.

Type: String


Pattern: \[a-zA-Z0-9\-\_\-]+**thingGroupMetadata (p. 266)**

Thing group metadata.

Type: ThingGroupMetadata (p. 827) object

**thingGroupName (p. 266)**

The name of the thing group.
Type: String


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

thingGroupProperties (p. 266)

The thing group properties.

Type: ThingGroupProperties (p. 828) object

version (p. 266)

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: 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
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 uses the following URI parameters.

**taskId (p. 269)**

The task ID.

Length Constraints: Maximum length of 40.

Required: Yes

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. 269)**

The task creation date.

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

Type: Integer

The S3 bucket that contains the input file.

Type: String


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

The input file key.

Type: String


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

The date when the task was last modified.

Type: Timestamp

The message.

Type: String

Length Constraints: Maximum length of 2048.

The progress of the bulk provisioning task expressed as a percentage.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

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

Type: String


The status of the bulk thing provisioning task.

Type: String

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

The number of things successfully provisioned.
Type: Integer
taskId (p. 269)
The task ID.
Type: String
Length Constraints: Maximum length of 40.
templateBody (p. 269)
The task's template.
Type: String

Errors

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

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

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

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 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
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 uses the following URI parameters.

thingTypeName (p. 273)
The name of the thing type.
Pattern: [a-zA-Z0-9_:\-]+
Required: Yes

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. 273)
The thing type ARN.
Type: String

`thingTypeId (p. 273)`

The thing type ID.

Type: String

`thingTypeMetadata (p. 273)`

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. 832)` object

`thingTypeName (p. 273)`

The name of the thing type.

Type: String


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

`thingTypeProperties (p. 273)`

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

Type: `ThingTypeProperties (p. 833)` 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: 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
**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 uses the following URI parameters.

**policyName (p. 276)**

The policy to detach.

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

**Request Body**

The request accepts the following data in JSON format.

**target (p. 276)**

The target from which the policy will be detached.

- Type: String
- Required: Yes

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

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

**Errors**

**InternalFailureException**

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

HTTP Status Code: 400
LimitExceeded Exception
A limit has been exceeded.

HTTP Status Code: 410
ServiceUnavailableException
The service is temporarily unavailable.

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

HTTP Status Code: 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
DetachPrincipalPolicy
Service: AWS IoT

Removes the specified policy from the specified certificate.

**Note:** This API is deprecated. Please use DetachPolicy (p. 276) instead.

**Request Syntax**

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

**URI Request Parameters**

The request uses the following URI parameters.

- **policyName** (p. 278)
  - The name of the policy to detach.
  - Pattern: `[\w+=,.@-]+`
  - Required: Yes

- **principal** (p. 278)
  - The principal.
  - Required: Yes

**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: 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
**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 uses the following URI parameters.

- **securityProfileName** *(p. 280)*
  - The security profile that is detached.
  - Pattern: `[a-zA-Z0-9:_-]+`
  - Required: Yes

- **securityProfileTargetArn** *(p. 280)*
  - The ARN of the thing group from which the security profile is detached.
  - Required: Yes

**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: 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
**DetachThingPrincipal**

Service: AWS IoT

Detaches the specified principal from the specified thing. A principal can be X.509 certificates, IAM users, groups, and roles, Amazon Cognito identities or federated identities.

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

**Request Syntax**

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

**URI Request Parameters**

The request uses the following URI parameters.

**principal (p. 282)**

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.

- Required: Yes

**thingName (p. 282)**

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

**Request Body**

The request does not have a request body.

**Response Syntax**

```plaintext
HTTP/1.1 200
```

**Response Elements**

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

**Errors**

**InternalFailureException**

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

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 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
**DisableTopicRule**

Service: AWS IoT

Disables the rule.

**Request Syntax**

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

**URI Request Parameters**

The request uses the following URI parameters.

**ruleName (p. 284)**

- The name of the rule to disable.
- Pattern: `^[a-zA-Z0-9_]+$`
- Required: Yes

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

URI Request Parameters
The request uses the following URI parameters.

ruleName (p. 286)
The name of the topic rule to enable.
Pattern: ^[a-zA-Z0-9_]+$
Required: Yes

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
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. 288)**

The field to aggregate.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**indexName (p. 288)**

The name of the index to search.

Type: String


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

Required: No

**queryString (p. 288)**

The search query.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**queryVersion (p. 288)**

The query version.
GetCardinality

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. 289)
   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: 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
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 uses the following URI parameters.

thingName (p. 291)
The thing name.


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

Request Body

The request accepts the following data in JSON format.

cognitoIdentityPoolId (p. 291)
The Cognito identity pool ID.
Type: String
Required: No

principal (p. 291)
Type: String
Required: No

Response Syntax

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

{
    "effectivePolicies": [
}
```
GetEffectivePolicies

```json
{
    "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. 291)
  - The effective policies.
  - Type: Array of EffectivePolicy (p. 710) 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: 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
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. 294)**

The index configuration.

Type: ThingGroupIndexingConfiguration (p. 826) object

**thingIndexingConfiguration (p. 294)**

Thing indexing configuration.

Type: ThingIndexingConfiguration (p. 829) 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: 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
GetJobDocument

Service: AWS IoT

Gets a job document.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

jobId (p. 297)

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-_.]+  

Required: Yes

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. 297)

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: 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
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. 299)

The logging level.

Type: String

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

roleArn (p. 299)

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 uses the following URI parameters.

otaUpdateId (p. 301)

The OTA update ID.


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

Required: Yes

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": {  
      "exponentialRate": {  
        "baseRatePerMinute": number,  
        "incrementFactor": number,  
        "rateIncreaseCriteria": {  
          "numberOfNotifiedThings": number,  
          "numberOfSucceededThings": number
        }
      },  
      "maximumPerMinute": number
    },  
    "awsJobPresignedUrlConfig": {  
      "expiresInSec": number
    },  
    "creationDate": number,  
    "description": "string",  
    "errorInfo": {  
      "code": "string",  
      "message": "string"
    }
  }
}
AWS IoT API Reference
GetOTAUpdate

Response Elements

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. 301)

The OTA update info.

Type: OTAUpdateInfo (p. 763) 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: 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
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. 304)**

The field to aggregate.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**indexName (p. 304)**

The name of the index to search.

Type: String


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

Required: No

**percents (p. 304)**

The percentile groups returned.

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

Required: No

**queryString (p. 304)**

The query string.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**queryVersion (p. 304)**

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. 305)**

The percentile values of the aggregated fields.

Type: Array of PercentPair (p. 769) 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: 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
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 uses the following URI parameters.

policyName (p. 307)
The name of the policy.
Pattern: \w+=,.@\-]+
Required: Yes

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. 307)
The date the policy was created.
Type: Timestamp
defaultVersionId (p. 307)
The default policy version ID.
Type: String
    Pattern: [0-9]+

`generationId (p. 307)`
    The generation ID of the policy.
    Type: String

`lastModifiedDate (p. 307)`
    The date the policy was last modified.
    Type: Timestamp

`policyArn (p. 307)`
    The policy ARN.
    Type: String

`policyDocument (p. 307)`
    The JSON document that describes the policy.
    Type: String

`policyName (p. 307)`
    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: 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
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 uses the following URI parameters.

policyName (p. 310)

The name of the policy.


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

Required: Yes

policyVersionId (p. 310)

The policy version ID.

Pattern: [0-9]+

Required: Yes

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. 310)
    The date the policy was created.
    Type: Timestamp

generationId (p. 310)
    The generation ID of the policy version.
    Type: String

isDefaultVersion (p. 310)
    Specifies whether the policy version is the default.
    Type: Boolean

lastModifiedDate (p. 310)
    The date the policy was last modified.
    Type: Timestamp

policyArn (p. 310)
    The policy ARN.
    Type: String

policyDocument (p. 310)
    The JSON document that describes the policy.
    Type: String

policyName (p. 310)
    The policy name.
    Type: String
    Pattern: [\w+=,.@-]+

policyVersionId (p. 310)
    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: 400
UnauthorizedException
You are not authorized to perform this operation.

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for 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. 313)

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: 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
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

```plaintext
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. 315)`
The aggregation field name.

Type: String

Length Constraints: Minimum length of 1.

Required: No

`indexName (p. 315)`
The name of the index to search. The default value is `AWS_Things`.

Type: String


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

Required: No

`queryString (p. 315)`
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. 315)

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. 316)

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

Type: Statistics (p. 807) 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: 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
GetTopicRule
Service: AWS IoT

Gets information about the rule.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

**ruleName** (p. 318)

The name of the rule.


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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "rule": {
      "actions": [
         {
            "cloudwatchAlarm": {
               "alarmName": "string",
               "roleArn": "string",
               "stateReason": "string",
               "stateValue": "string"
            },
            "cloudwatchLogs": {
               "logGroupName": "string",
               "roleArn": "string"
            },
            "cloudwatchMetric": {
               "metricName": "string",
               "metricNamespace": "string",
               "metricTimestamp": "string",
               "metricUnit": "string",
               "metricValue": "string",
               "roleArn": "string"
            },
            "dynamoDB": {
               "hashKeyField": "string",
               "hashKeyType": "string",
```

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GetTopicRule

"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": {
  "putAssetPropertySetValueEntries": [
    {
      "assetId": "string",
      "entryId": "string",
      "propertyAlias": "string",
      "propertyId": "string",
      "propertyValues": [
        {
          "quality": "string",
          "timestamp": {
            "offsetInNanos": "string"
          }
        }
      ]
    }
  ]
```json
"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"
},
"timestream": {
  "databaseName": "string",
  "dimensions": [{
    "name": "string",
    "value": "string"
  },
  "roleArn": "string",
  "tableName": "string",
  "timestamp": {
    "unit": "string",
    "value": "string"
  }
}
```

GetTopicRule

```json
{
  "awsIotSqlVersion": "string",
  "createdAt": number,
  "description": "string",
  "errorAction": {
    "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"
    },
    "http": {
      "auth": {
        "sigv4": {
          "roleArn": "string",
          "serviceName": "string",
          "signingRegion": "string"
        }
      },
      "confirmationUrl": "string",
      "headers": {
```

"messageFormat": "string",
"roleArn": "string",
"targetArn": "string"
},
"sqs": {
"queueUrl": "string",
"roleArn": "string",
"useBase64": boolean
},
"stepFunctions": {
"executionNamePrefix": "string",
"roleArn": "string",
"stateMachineName": "string"
},
"timestream": {
"databaseName": "string",
"dimensions": [
{
"name": "string",
"value": "string"
}
],
"roleArn": "string",
"tableName": "string",
"timestamp": {
"unit": "string",
"value": "string"
}
},
"ruleDisabled": boolean,
"ruleName": "string",
"sql": "string"
},
"ruleArn": "string"
}

### Response Elements

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

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

**rule (p. 318)**

The rule.

Type: TopicRule (p. 840) object

**ruleArn (p. 318)**

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 uses the following URI parameters.

`arn (p. 325)`

The ARN of the topic rule destination.

Required: Yes

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. 325)`

The topic rule destination.

Type: `TopicRuleDestination (p. 842)` 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. 327)
The default log level.
Type: String
Valid Values: DEBUG | INFO | ERROR | WARN | DISABLED
disableAllLogs (p. 327)
Disables all logs.
Type: Boolean
roleArn (p. 327)
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 uses the following URI parameters.

maxResults (p. 329)

The maximum number of results to return at one time.


nextToken (p. 329)

The token for the next set of results.

securityProfileName (p. 329)

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


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

thingName (p. 329)

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. 329)

The list of active violations.

Type: Array of ActiveViolation (p. 646) objects

nextToken (p. 329)

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: 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
ListAttachedPolicies
Service: AWS IoT

Lists the policies attached to the specified thing group.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

marker (p. 332)
The token to retrieve the next set of results.
Pattern: [A-Za-z0-9+/]+={0,2}

pageSize (p. 332)
The maximum number of results to be returned per request.

recursive (p. 332)
When true, recursively list attached policies.

target (p. 332)
The group or principal for which the policies will be listed. Valid principals are CertificateArn (arn:aws:iot:region:accountId:cert/certificateId), thingGroupArn (arn:aws:iot:region:accountId:thinggroup/groupName) and CognitoId (region:id).
Required: Yes

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. 332)**

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. 332)**

The policies.

Type: Array of Policy (p. 770) 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: 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
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 90 days.)

Request Syntax

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

{
    "checkName": "string",
    "endTime": number,
    "listSuppressedFindings": boolean,
    "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. 335)

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

Type: String

Required: No

endTime (p. 335)

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
listSuppressedFindings (p. 335)

Boolean flag indicating whether only the suppressed findings or the unsuppressed findings should be listed. If this parameter isn't provided, the response will list both suppressed and unsuppressed findings.

Type: Boolean
Required: No

maxResults (p. 335)

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

Type: Integer
Required: No

nextToken (p. 335)

The token for the next set of results.

Type: String
Required: No

resourceIdentifier (p. 335)

Information identifying the noncompliant resource.

Type: ResourceIdentifier (p. 787) object
Required: No

startTime (p. 335)

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. 335)

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": [
```
Response Elements

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. 336)

The findings (results) of the audit.
Type: Array of `AuditFinding` objects

`nextToken` (p. 336)

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: 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
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 uses the following URI parameters.

actionStatus (p. 339)

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

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

findingId (p. 339)

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


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

Required: Yes

maxResults (p. 339)

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


nextToken (p. 339)

The token for the next set of results.

taskId (p. 339)

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


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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "actionsExecutions": [
    {
        "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. 339)

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. 660) objects

nextToken (p. 339)

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: 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
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 uses the following URI parameters.

- **auditTaskId (p. 342)**
  
  Specify this filter to limit results to tasks that were applied to results for a specific audit.
  
  
  Pattern: `[a-zA-Z0-9-]+`

- **endTime (p. 342)**
  
  Specify this filter to limit results to tasks that were completed or canceled on or before a specific date and time.
  
  Required: Yes

- **findingId (p. 342)**
  
  Specify this filter to limit results to tasks that were applied to a specific audit finding.
  
  
  Pattern: `[a-zA-Z0-9-_]+`

- **maxResults (p. 342)**
  
  The maximum number of results to return at one time. The default is 25.
  

- **nextToken (p. 342)**
  
  The token for the next set of results.

- **startTime (p. 342)**
  
  Specify this filter to limit results to tasks that began on or after a specific date and time.
  
  Required: Yes

- **taskStatus (p. 342)**
  
  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. 343)

The token for the next set of results.

Type: String
tasks (p. 343)

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

Type: Array of AuditMitigationActionsTaskMetadata (p. 662) 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: 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
ListAuditSuppressions

Service: AWS IoT

Lists your Device Defender audit listings.

Request Syntax

POST /audit/suppressions/list HTTP/1.1
Content-type: application/json

```
{
    "ascendingOrder": boolean,
    "checkName": "string",
    "maxResults": number,
    "nextToken": "string",
    "resourceIdentifier": {
        "account": "string",
        "caCertificateId": "string",
        "clientId": "string",
        "cognitoIdentityPoolId": "string",
        "deviceCertificateId": "string",
        "iamRoleArn": "string",
        "policyVersionIdentifier": {
            "policyName": "string",
            "policyVersionId": "string"
        },
        "roleAliasArn": "string"
    }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**ascendingOrder (p. 345)**

Determines whether suppressions are listed in ascending order by expiration date or not. If parameter isn't provided, ascendingOrder=true.

Type: Boolean

Required: No

**checkName (p. 345)**

An audit check name. 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: String

Required: No

**maxResults (p. 345)**

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


Required: No

nextToken (p. 345)

The token for the next set of results.

Type: String

Required: No

resourceIdentifier (p. 345)

Information that identifies the noncompliant resource.

Type: ResourceIdentifier (p. 787) object

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "nextToken": "string",
   "suppressions": [
      {
         "checkName": "string",
         "description": "string",
         "expirationDate": number,
         "resourceIdentifier": {
            "account": "string",
            "caCertificateId": "string",
            "clientId": "string",
            "cognitoIdentityPoolId": "string",
            "deviceCertificateId": "string",
            "iamRoleArn": "string",
            "policyVersionIdentifier": {
               "policyName": "string",
               "policyVersionId": "string"
            },
            "roleAliasArn": "string"
         },
         "suppressIndefinitely": boolean
      }
   ]
}

Response Elements

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. 346)

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

**suppressions (p. 346)**

List of audit suppressions.

Type: Array of **AuditSuppression (p. 665)** 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: 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
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 uses the following URI parameters.

endTime (p. 348)
The end of the time period.
Required: Yes

maxResults (p. 348)
The maximum number of results to return at one time. The default is 25.

nextToken (p. 348)
The token for the next set of results.

startTime (p. 348)
The beginning of the time period. Audit information is retained for a limited time (90 days).
Requesting a start time prior to what is retained results in an "InvalidRequestException".
Required: Yes

taskStatus (p. 348)
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. 348)
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. 348)

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. 348)

The audits that were performed during the specified time period.

Type: Array of AuditTaskMetadata (p. 667) 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: 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
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 uses the following URI parameters.

ascendingOrder (p. 351)
    Return the list of authorizers in ascending alphabetical order.
marker (p. 351)
    A marker used to get the next set of results.
Pattern: [A-Za-z0-9+/]+={0,2}
pageSize (p. 351)
    The maximum number of results to return at one time.
status (p. 351)
    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. 351)**

The authorizers.

Type: Array of AuthorizerSummary (p. 672) objects

**nextMarker (p. 351)**

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: 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
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 uses the following URI parameters.

maxResults (p. 354)

The maximum number of results to return per request.


namePrefixFilter (p. 354)

Limit the results to billing groups whose names have the given prefix.


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

nextToken (p. 354)

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.
billingGroups (p. 354)
    The list of billing groups.
    Type: Array of GroupNameAndArn (p. 719) objects
nextToken (p. 354)
    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: 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
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 uses the following URI parameters.

ascendingOrder (p. 356)
Determines the order of the results.

marker (p. 356)
The marker for the next set of results.
Pattern: [A-Za-z0-9+/]++\{0,2\}

pageSize (p. 356)
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. 356)**

The CA certificates registered in your AWS account.

Type: Array of **CACertificate (p. 686)** objects

**nextMarker (p. 356)**

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: 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
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 uses the following URI parameters.

ascendingOrder (p. 359)
Specifies the order for results. If True, the results are returned in ascending order, based on the creation date.

marker (p. 359)
The marker for the next set of results.
Pattern: [A-Za-z0-9+/-]{0,2}

pageSize (p. 359)
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",
      "certificateMode": "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. 359)**

The descriptions of the certificates.

Type: Array of Certificate (p. 689) objects

**nextMarker (p. 359)**

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: 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
**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 uses the following URI parameters.

**ascendingOrder (p. 362)**

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

**caCertificateId (p. 362)**

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

Required: Yes

**marker (p. 362)**

The marker for the next set of results.

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

**pageSize (p. 362)**

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",
      "certificateMode": "string",
      "creationDate": number,
   }
```

362
"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. 362)**

The device certificates signed by the specified CA certificate.

Type: Array of Certificate (p. 689) objects

**nextMarker (p. 362)**

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: 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
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 uses the following URI parameters.

- `maxResults` (p. 365)
  The maximum number of results to retrieve at one time.
- `nextToken` (p. 365)
  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. 365)
  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. 365)
  A token that can be used to retrieve the next set of results, or null if there are no additional results.
Errors

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**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
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 uses the following URI parameters.

marker (p. 367)
The marker for the next set of results.
Pattern: [A-Za-z0-9+/]+={0,2}

pageSize (p. 367)
The result page size.

serviceType (p. 367)
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. 367)**
A list of objects that contain summary information about the user's domain configurations.
Type: Array of DomainConfigurationSummary (p. 706) objects

**nextMarker (p. 367)**
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: 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
ListIndices

Service: AWS IoT

Lists the search indices.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

maxResults (p. 370)

The maximum number of results to return at one time.


nextToken (p. 370)

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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "indexNames": [ "string" ],
  "nextToken": "string"
}

Response Elements

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

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

indexNames (p. 370)

The index names.

Type: Array of strings


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

nextToken (p. 370)

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: 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
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 uses the following URI parameters.

**jobId (p. 372)**

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-_]+

Required: Yes

**maxResults (p. 372)**

The maximum number of results to be returned per request.


**nextToken (p. 372)**

The token to retrieve the next set of results.

**status (p. 372)**

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

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

Response Elements

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

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

**executionSummaries (p. 372)**

A list of job execution summaries.

Type: Array of JobExecutionSummaryForJob (p. 741) objects

**nextToken (p. 372)**

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: 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
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 uses the following URI parameters.

maxResults (p. 375)

The maximum number of results to be returned per request.


nextToken (p. 375)

The token to retrieve the next set of results.

status (p. 375)

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. 375)

The thing name.


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

Required: Yes

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"
},
"nextToken": "string"
}

Response Elements

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

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

**executionSummaries (p. 375)**

A list of job execution summaries.

Type: Array of [JobExecutionSummaryForThing (p. 742)] objects

**nextToken (p. 375)**

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: 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
## ListJobs

### Service: AWS IoT

Lists jobs.

### Request Syntax

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

### URI Request Parameters

The request uses the following URI parameters.

- **maxResults (p. 378)**
  - The maximum number of results to return per request.

- **nextToken (p. 378)**
  - The token to retrieve the next set of results.

- **status (p. 378)**
  - 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. 378)**
  - 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. 378)**
  - A filter that limits the returned jobs to those for the specified group.
  - Pattern: [a-zA-Z0-9\-]+

- **thingGroupName (p. 378)**
  - 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. 379)
A list of jobs.
Type: Array of JobSummary (p. 745) objects

nextToken (p. 379)
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: 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
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 uses the following URI parameters.

actionType (p. 381)
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. 381)
The maximum number of results to return at one time. The default is 25.


nextToken (p. 381)
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. 381)**

A set of actions that matched the specified filter criteria.

Type: Array of MitigationActionIdentifier (p. 757) objects

**nextToken (p. 381)**

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: 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
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 uses the following URI parameters.

**maxResults (p. 383)**

The maximum number of results to return at one time.


**nextToken (p. 383)**

A token used to retrieve the next set of results.

**otaUpdateStatus (p. 383)**

The OTA update job status.

Valid Values: CREATE_PENDING | CREATE_IN_PROGRESS | CREATE_COMPLETE | CREATE_FAILED

Request Body

The request does not have a request body.

Response Syntax

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

{
    "nextToken": "string",
    "otaUpdates": [
        {
            "creationDate": number,
            "otaUpdateArn": "string",
            "otaUpdateId": "string"
        }
    ]
}
```

Response Elements

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

The following data is returned in JSON format by the service.
nextToken (p. 383)

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

otaUpdates (p. 383)

A list of OTA update jobs.
Type: Array of OTAUpdateSummary (p. 766) 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: 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
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 uses the following URI parameters.

ascendingOrder (p. 385)
Specifies the order for results. If True, the results are returned in ascending order, based on the creation date.

marker (p. 385)
The marker for the next set of results.
Pattern: [A-Za-z0-9+/]{0,2}

pageSize (p. 385)
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. 385)**

The marker for the next set of results.

Type: String

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

**outgoingCertificates (p. 385)**

The certificates that are being transferred but not yet accepted.

Type: Array of OutgoingCertificate (p. 767) 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: 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
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 uses the following URI parameters.

ascendingOrder (p. 388)
Specifies the order for results. If true, the results are returned in ascending creation order.

marker (p. 388)
The marker for the next set of results.
Pattern: [A-Za-z0-9+/]=\{0,2\}

pageSize (p. 388)
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. 388)
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. 388)*

The descriptions of the policies.

Type: Array of *Policy (p. 770)* 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: 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
ListPolicyPrincipals
Service: AWS IoT

Lists the principals associated with the specified policy.

Note: This API is deprecated. Please use ListTargetsForPolicy (p. 418) 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 uses the following URI parameters.

ascendingOrder (p. 390)

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

marker (p. 390)

The marker for the next set of results.

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

pageSize (p. 390)

The result page size.


policyName (p. 390)

The policy name.


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

Required: Yes

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. 390)

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. 390)

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: 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
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 uses the following URI parameters.

policyName (p. 393)

The policy name.


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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

```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. 393)

The policy versions.

Type: Array of PolicyVersion (p. 771) 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: 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
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. 332) instead.

**Request Syntax**

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

**URI Request Parameters**

The request uses the following URI parameters.

- **ascendingOrder (p. 395)**
  - Specifies the order for results. If true, results are returned in ascending creation order.
- **marker (p. 395)**
  - The marker for the next set of results.
  - Pattern: [A-Za-z0-9+/]+={0,2}
- **pageSize (p. 395)**
  - The result page size.
- **principal (p. 395)**
  - Required: Yes

**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. 395)**

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. 395)**

The policies.

- **Type:** Array of Policy (p. 770) 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: 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
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 uses the following URI parameters.

maxResults (p. 398)

The maximum number of results to return in this operation.


nextToken (p. 398)

The token to retrieve the next set of results.

principal (p. 398)

The principal.

Required: Yes

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. 398)

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

Type: String
things (p. 398)

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: 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
ListProvisioningTemplates

Service: AWS IoT

Lists the fleet provisioning templates in your AWS account.

Request Syntax

```
GET /provisioning-templates?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

```
maxResults (p. 401)
```

The maximum number of results to return at one time.


```
nextToken (p. 401)
```

A 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",
  "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. 401)
```

A token to retrieve the next set of results.

Type: String
templates (p. 401)
A list of fleet provisioning templates
Type: Array of ProvisioningTemplateSummary (p. 775) 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: 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
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 uses the following URI parameters.

**maxResults (p. 403)**

The maximum number of results to return at one time.


**nextToken (p. 403)**

A token to retrieve the next set of results.

**TemplateName (p. 403)**

The name of the fleet provisioning template.


Pattern: ^[0-9A-Za-z_—]+$

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{  
  "nextToken": "string",
  "versions": [  
    {  
      "creationDate": number,
      "isDefaultVersion": boolean,
      "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.

**nextToken (p. 403)**

A token to retrieve the next set of results.

Type: String

**versions (p. 403)**

The list of fleet provisioning template versions.

Type: Array of `ProvisioningTemplateVersionSummary (p. 777)` 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: 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
**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 uses the following URI parameters.

- **ascendingOrder (p. 406)**
  
  Return the list of role aliases in ascending alphabetical order.

- **marker (p. 406)**
  
  A marker used to get the next set of results.
  
  Pattern: `[A-Za-z0-9+/]+={0,2}`

- **pageSize (p. 406)**
  
  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. 406)**
  
  A marker used to get the next set of results.
  
  Type: String
  
  Pattern: `[A-Za-z0-9+/]+={0,2}`
roleAliases (p. 406)

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: 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
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 uses the following URI parameters.

maxResults (p. 408)

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


nextToken (p. 408)

The token for the next set of results.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "nextToken": "string",
   "scheduledAudits": [
      {
         "dayOfMonth": "string",
         "dayOfWeek": "string",
         "frequency": "string",
         "scheduledAuditArn": "string",
         "scheduledAuditName": "string"
      }
   ]
}

Response Elements

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

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

nextToken (p. 408)

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. 408)

The list of scheduled audits.

Type: Array of ScheduledAuditMetadata (p. 795) 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: 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
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 uses the following URI parameters.

dimensionName (p. 410)

A filter to limit results to the security profiles that use the defined dimension.


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

maxResults (p. 410)

The maximum number of results to return at one time.


nextToken (p. 410)

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. 410)

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. 410)

A list of security profile identifiers (names and ARNs).

Type: Array of SecurityProfileIdentifier (p. 797) 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: 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
**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 uses the following URI parameters.

- **maxResults (p. 412)**
  The maximum number of results to return at one time.

- **nextToken (p. 412)**
  The token for the next set of results.

- **recursive (p. 412)**
  If true, return child groups too.

- **securityProfileTargetArn (p. 412)**
  The ARN of the target (thing group) whose attached security profiles you want to get.
  Required: Yes

**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. 412)

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. 412)

A list of security profiles and their associated targets.

Type: Array of SecurityProfileTargetMapping (p. 799) 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: 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
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 uses the following URI parameters.

 ascendingOrder (p. 414)
 Set to true to return the list of streams in ascending order.

 maxResults (p. 414)
 The maximum number of results to return at a time.

 nextToken (p. 414)
 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. 414)
 A token used to get the next set of results.
Type: String

**streams (p. 414)**

A list of streams.

Type: Array of **StreamSummary (p. 814)** 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: 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
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 uses the following URI parameters.

nextToken (p. 416)

The token to retrieve the next set of results.

resourceArn (p. 416)

The ARN of the resource.

Required: Yes

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. 416)

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

Type: String
tags (p. 416)

The list of tags assigned to the resource.
Type: Array of Tag (p. 815) 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: 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
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 uses the following URI parameters.

marker (p. 418)
A marker used to get the next set of results.
Pattern: [A-Za-z0-9+/]{0,2}

pageSize (p. 418)
The maximum number of results to return at one time.
	policyName (p. 418)
The policy name.
Pattern: [\w+=,.@-]+
Required: Yes

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. 418)
A marker used to get the next set of results.
Type: String
Pattern: [A-Za-z0-9+/]+={0,2}

**targets (p. 418)**

The policy targets.

Type: Array of strings

**Errors**

**InternalFailureException**

An unexpected error has occurred.

HTTP Status Code: 500

**InvalidRequestException**

The request is not valid.

HTTP Status Code: 400

**LimitExceededException**

A limit has been exceeded.

HTTP Status Code: 410

**ResourceNotFoundException**

The specified resource does not exist.

HTTP Status Code: 404

**ServiceUnavailableException**

The service is temporarily unavailable.

HTTP Status Code: 503

**ThrottlingException**

The rate exceeds the limit.

HTTP Status Code: 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
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 uses the following URI parameters.

**maxResults (p. 421)**

The maximum number of results to return at one time.


**nextToken (p. 421)**

The token for the next set of results.

**securityProfileName (p. 421)**

The security profile.


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

Required: Yes

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. 421)

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. 421)

The thing groups to which the security profile is attached.

Type: Array of SecurityProfileTarget (p. 798) 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: 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
**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 uses the following URI parameters.

*maxResults (p. 423)*

The maximum number of results to return at one time.


*namePrefixFilter (p. 423)*

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


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

*nextToken (p. 423)*

The token to retrieve the next set of results.

*parentGroup (p. 423)*

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


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

*recursive (p. 423)*

If true, return child groups as well.

**Request Body**

The request does not have a request body.

**Response Syntax**

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

{
    "nextToken": "string",
    "thingGroups": [
        {
            "groupArn": "string",
```
Response Elements

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. 423)

The token used to get the next set of results. Will not be returned if operation has returned all results.

Type: String

thingGroups (p. 423)

The thing groups.

Type: Array of GroupNameAndArn (p. 719) 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 uses the following URI parameters.

- **maxResults (p. 426)**
  
  The maximum number of results to return at one time.
  

- **nextToken (p. 426)**
  
  The token to retrieve the next set of results.

- **thingName (p. 426)**
  
  The thing name.
  
  
  Pattern: [a-zA-Z0-9:._-]+
  
  Required: Yes

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"
    }
  ]
}
```

Response Elements

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. 426)**

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

Type: String

**thingGroups (p. 426)**

The thing groups.

Type: Array of GroupNameAndArn (p. 719) 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 uses the following URI parameters.

*thingName (p. 428)*

The name of the thing.


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

Required: Yes

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. 428)*

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: 400
UnauthorizedException
You are not authorized to perform this operation.

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

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

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

**URI Request Parameters**

The request uses the following URI parameters.

- **maxResults (p. 430)**
  The maximum number of results to return per request.

- **nextToken (p. 430)**
  The token to retrieve the next set of results.

- **reportType (p. 430)**
  The type of task report.
  Valid Values: ERRORS | RESULTS
  Required: Yes

- **taskId (p. 430)**
  The id of the task.
  Length Constraints: Maximum length of 40.
  Required: Yes

**Request Body**

The request does not have a request body.

**Response Syntax**

```plaintext
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. 430)**

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

Type: String

**reportType (p. 430)**

The type of task report.

Type: String

Valid Values: ERRORS | RESULTS

**resourceLinks (p. 430)**

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: 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
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 uses the following URI parameters.

maxResults (p. 433)
The maximum number of results to return at one time.

nextToken (p. 433)
The token to retrieve the next set of results.

status (p. 433)
The status of the bulk thing provisioning task.
Valid Values: InProgress | Completed | Failed | Cancelled | Cancelling

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "nextToken": "string",
  "taskId": [ "string" ]
}

Response Elements

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

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

nextToken (p. 433)
The token used to get the next set of results, or null if there are no additional results.
Type: String
taskIds (p. 433)
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: 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
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`.

**Note**
You will not be charged for calling this API if an `Access denied` error is returned. You will also not be charged if no attributes or pagination token was provided in request and no pagination token and no results were returned.

### Request Syntax

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

### URI Request Parameters

The request uses the following URI parameters.

- **attributeName (p. 435)**
  - The attribute name used to search for things.
  - Length Constraints: Maximum length of 128.
  - Pattern: `[a-zA-Z0-9_.,@/:#-]+`

- **attributeValue (p. 435)**
  - The attribute value used to search for things.
  - Length Constraints: Maximum length of 800.
  - Pattern: `[a-zA-Z0-9_.,@/:#-]*`

- **maxResults (p. 435)**
  - The maximum number of results to return in this operation.

- **nextToken (p. 435)**
  - The token to retrieve the next set of results.

- **thingTypeName (p. 435)**
  - 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
{
  "nextToken": "string",
  "things": [
    {
      "attributes": {
        "string": "string"
      },
      "thingArn": "string",
      "thingName": "string",
      "thingTypeName": "string",
      "version": number
    }
  ]
}

Response Elements

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

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

nextToken (p. 436)

The token used to get the next set of results. Will not be returned if operation has returned all results.

Type: String

things (p. 436)

The things.

Type: Array of ThingAttribute (p. 819) 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: 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
ListThingsInBillingGroup

Service: AWS IoT

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

**Request Syntax**

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

**URI Request Parameters**

The request uses the following URI parameters.

- **billingGroupName (p. 438)**
  - The name of the billing group.
  - Pattern: `[a-zA-Z0-9:_-]+`
  - Required: Yes

- **maxResults (p. 438)**
  - The maximum number of results to return per request.

- **nextToken (p. 438)**
  - The 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",
  "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. 438)**
  - The token used to get the next set of results. Will not be returned if operation has returned all results.
ListThingsInBillingGroup

Type: String

**things (p. 438)**

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: 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
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 uses the following URI parameters.

maxResults (p. 440)

The maximum number of results to return at one time.


nextToken (p. 440)

The token to retrieve the next set of results.

recursive (p. 440)

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

thingGroupName (p. 440)

The thing group name.


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

Required: Yes

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. 440)**

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

Type: String

**things (p. 440)**

The things in the specified thing group.

Type: Array of strings


Pattern: \[a-zA-Z0-9_:\-]+\n
**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 uses the following URI parameters.

maxResults (p. 442)

The maximum number of results to return in this operation.


nextToken (p. 442)

The token to retrieve the next set of results.

thingTypeName (p. 442)

The name of the thing type.


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

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

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

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

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

**nextToken (p. 442)**

The token for the next set of results. Will not be returned if operation has returned all results.

Type: String

**thingTypes (p. 442)**

The thing types.

Type: Array of [ThingTypeDefinition (p. 831)] 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: 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
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 uses the following URI parameters.

maxResults (p. 445)

The maximum number of results to return at one time.
Valid Range: Minimum value of 1. Maximum value of 1000.

nextToken (p. 445)

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. 445)

Information about a topic rule destination.
Type: Array of TopicRuleDestinationSummary (p. 845) objects
nextToken (p. 445)

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 uses the following URI parameters.

- **maxResults (p. 447)**
  The maximum number of results to return.
  Valid Range: Minimum value of 1. Maximum value of 10000.

- **nextToken (p. 447)**
  A token used to retrieve the next value.

- **ruleDisabled (p. 447)**
  Specifies whether the rule is disabled.

- **topic (p. 447)**
  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. 447)
A token used to retrieve the next value.
Type: String

rules (p. 447)
The rules.
Type: Array of TopicRuleListItem (p. 847) 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 uses the following URI parameters.

maxResults (p. 449)

The maximum number of results to return at one time.


nextToken (p. 449)

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

targetType (p. 449)

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

Valid Values: DEFAULT | THING_GROUP

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "logTargetConfigurations": [
      {
         "logLevel": "string",
         "logTarget": {
            "targetName": "string",
            "targetType": "string"
         }
      },
      {
         "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. 449)**

The logging configuration for a target.

Type: Array of LogTargetConfiguration (p. 752) objects

**nextToken (p. 449)**

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 uses the following URI parameters.

**endTime (p. 451)**

The end time for the alerts to be listed.

Required: Yes

**maxResults (p. 451)**

The maximum number of results to return at one time.


**nextToken (p. 451)**

The token for the next set of results.

**securityProfileName (p. 451)**

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


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

**startTime (p. 451)**

The start time for the alerts to be listed.

Required: Yes

**thingName (p. 451)**

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

{
```
Response Elements

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. 451)**

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

Type: String

**violationEvents (p. 451)**

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

Type: Array of ViolationEvent (p. 854) 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: 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
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

```json
POST /cacertificate?allowAutoRegistration=allowAutoRegistration&setAsActive=setAsActive HTTP/1.1
Content-type: application/json

{
    "caCertificate": "string",
    "registrationConfig": {
        "roleArn": "string",
        "templateBody": "string"
    },
    "tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ],
    "verificationCertificate": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

allowAutoRegistration (p. 454)

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

setAsActive (p. 454)

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. 454)

The CA certificate.

Type: String


Required: Yes

registrationConfig (p. 454)

Information about the registration configuration.

Type: RegistrationConfig (p. 783) object
RegisterCA Certificate

Required: No

tags (p. 454)

Metadata which can be used to manage the CA certificate.

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. 815) objects

Required: No

verificationCertificate (p. 454)

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. 455)

The CA certificate ARN.

Type: String
certificateId (p. 455)

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: 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](#)
RegisterCertificate

Service: AWS IoT

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

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

setAsActive (p. 458)

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. 458)

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

Type: String


Required: No

certificatePem (p. 458)

The certificate data, in PEM format.

Type: String


Required: Yes

status (p. 458)

The status of the register certificate request.

Type: String

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

Response Syntax

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

Response Elements

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

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

certificateArn (p. 459)
   The certificate ARN.
   Type: String

certificateId (p. 459)
   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: 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
RegisterCertificateWithoutCA
Service: AWS IoT

Register a certificate that does not have a certificate authority (CA).

Request Syntax

```
POST /certificate/register-no-ca HTTP/1.1
Content-type: application/json
{
    "certificatePem": "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.

certificatePem (p. 461)

- The certificate data, in PEM format.
- Type: String
- Required: Yes

status (p. 461)

- The status of the register certificate request.
- Type: String
- Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING_TRANSFER | REGISTER_INACTIVE | PENDING_ACTIVATION
- Required: No

Response Syntax

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

Response Elements

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

**certificateArn (p. 461)**

The Amazon Resource Name (ARN) of the registered certificate.

Type: String

**certificateId (p. 461)**

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

Type: String

Length Constraints: Fixed length of 64.

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

### Errors

**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: 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
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

```plaintext
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. 464)

- The parameters for provisioning a thing. See Provisioning Templates for more information.
- Type: String to string map
- Required: No

templateBody (p. 464)

- The provisioning template. See Provisioning Devices That Have Device Certificates for more information.
- Type: String
- Required: Yes

Response Syntax

```plaintext
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. 464)

The certificate data, in PEM format.

Type: String


resourceArns (p. 464)

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: 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
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. 359) 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 uses the following URI parameters.

certificateId (p. 467)

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]+ 

Required: Yes

Request Body

The request accepts the following data in JSON format.

rejectReason (p. 467)

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: 400

**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

```plaintext
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. 469)**
  - The ARN of the billing group.
  - Type: String
  - Required: No

- **billingGroupName (p. 469)**
  - The name of the billing group.
  - Type: String
  - Pattern: [a-zA-Z0-9:_-]+
  - Required: No

- **thingArn (p. 469)**
  - The ARN of the thing to be removed from the billing group.
  - Type: String
  - Required: No

- **thingName (p. 469)**
  - The name of the thing to be removed from the billing group.
  - Type: String
RemoveThingFromBillingGroup

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: 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
RemoveThingFromThingGroup

Service: AWS IoT

Remove the specified thing from the specified group.

You must specify either a thingGroupArn or a thingGroupName to identify the thing group and either a thingArn or a thingName to identify the thing to remove from the thing group.

Request Syntax

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

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

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**thingArn (p. 471)**

The ARN of the thing to remove from the group.

Type: String

Required: No

**thingGroupArn (p. 471)**

The group ARN.

Type: String

Required: No

**thingGroupName (p. 471)**

The group name.

Type: String


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

Required: No

**thingName (p. 471)**

The name of the thing to remove from the group.

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

Response Syntax

HTTP/1.1 200

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

Errors

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

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

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

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 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
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",  
          "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": [
        {
          "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"
},
"timestream": {
  "databaseName": "string",
  "dimensions": [
    {
      "name": "string",
      "value": "string"
    }
  ],
  "roleArn": "string",
  "tableName": "string",
  "timestamp": {
    "unit": "string",
    "value": "string"
  }
},
"awsIotSqlVersion": "string",
"description": "string",
"errorAction": {
  "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"
},
"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"
},
"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"
},
"timestream": {
  "databaseName": "string",
  "dimensions": [
    {
      "name": "string",
      "value": "string"
    }
  ],
  "roleArn": "string",
  "tableName": "string",
  "timestamp": {
    "unit": "string",
    "value": "string"
URI Request Parameters

The request uses the following URI parameters.

**ruleName (p. 473)**

The name of the rule.

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

Request Body

The request accepts the following data in JSON format.

**topicRulePayload (p. 473)**

The rule payload.

- Type: `TopicRulePayload (p. 848)` 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. 480)**

The search index name.

Type: String


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

Required: No

**maxResults (p. 480)**

The maximum number of results to return at one time.

Type: Integer


Required: No

**nextToken (p. 480)**

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

Type: String

Required: No

**queryString (p. 480)**

The search query string.
Type: String
Length Constraints: Minimum length of 1.
Required: Yes

queryVersion (p. 480)
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. 481)
The token used to get the next set of results, or null if there are no additional results.
Type: String
thingGroups (p. 481)

The thing groups that match the search query.

Type: Array of ThingGroupDocument (p. 824) objects

things (p. 481)

The things that match the search query.

Type: Array of ThingDocument (p. 822) 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: 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
SetDefaultAuthorizer
Service: AWS IoT

Sets the default authorizer. This will be used if a websocket connection is made without specifying an authorizer.

Request Syntax

```plaintext
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. 484)`

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. 484)`

The authorizer ARN.

Type: String
**authorName (p. 484)**

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: 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
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 uses the following URI parameters.

policyName (p. 487)
  The policy name.
  Pattern: [\w+=,.@-]+
  Required: Yes

policyVersionId (p. 487)
  The policy version ID.
  Pattern: [0-9]+
  Required: Yes

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: 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
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. 489)

The logging options payload.

Type: LoggingOptionsPayload (p. 750) 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. 491)

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

logTarget (p. 491)

   The log target.
   Type: LogTarget (p. 751) 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
LimitExceeded Exception
A limit has been exceeded.

HTTP Status Code: 410
NotConfiguredException
The resource is not configured.

HTTP Status Code: 404
ServiceUnavailable Exception
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

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

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

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

defaultLogLevel (p. 493)

The default logging level.

Type: String

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

Required: No

disableAllLogs (p. 493)

If true all logs are disabled. The default is false.

Type: Boolean

Required: No

roleArn (p. 493)

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

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 uses the following URI parameters.

taskId (p. 495)

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-_]+

Required: Yes

Request Body

The request accepts the following data in JSON format.

auditCheckToActionsMapping (p. 495)

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. 495)

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.

Type: String
Length Constraints: Minimum length of 1. Maximum length of 64.
Pattern: ^[a-zA-Z0-9-\_]+$
Required: Yes

target (p. 495)

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. 663) 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. 496)

The unique identifier for the audit mitigation task. This matches the taskId that you specified in the request.

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

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: 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
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. 498)

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. 498)

The ID of the on-demand audit you started.

Type: String

Pattern: [a-zA-Z0-9-\-\_]+
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. 500)

The S3 bucket that contains the input file.

Type: String


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

Required: Yes

inputFileKey (p. 500)

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. 500)

The IAM role ARN that grants permission the input file.

Type: String


Required: Yes
templateBody (p. 500)
   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. 501)
   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: 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
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 uses the following URI parameters.

**taskId (p. 503)**

- The bulk thing provisioning task ID.
- Length Constraints: Maximum length of 40.
- Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```plaintext
HTTP/1.1 200
```

Response Elements

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

Errors

**InternalFailureException**

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

**InvalidRequestException**

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

**ResourceNotFoundException**

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

**ThrottlingException**

- The rate exceeds the limit.
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
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. 505)
The ARN of the resource.
Type: String
Required: Yes
tag (p. 505)
The new or modified tags for the resource.
Type: Array of Tag (p. 815) 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: 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
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 uses the following URI parameters.

clientId (p. 507)

The MQTT client ID.

Request Body

The request accepts the following data in JSON format.

authInfos (p. 507)

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

Type: Array of AuthInfo (p. 668) objects

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

Required: Yes
cognitoIdentityPoolId (p. 507)

The Cognito identity pool ID.

Type: String

Required: No
policyNamesToAdd (p. 507)

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

Type: Array of strings


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

Required: No

**policyNamesToSkip (p. 507)**

When testing custom authorization, the policies specified here are treated as if they are not attached to the principal being authorized.

Type: Array of strings


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

Required: No

**principal (p. 507)**


Type: String

Required: No

**Response Syntax**

```json
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": [ 
                        
                    ] 
                }, 
                "denied": [ 
                    { "policies": [ 
                        { "policyArn": "string", 
                          "policyName": "string" 
                    ] 
                } 
            } 
        ] 
    ] 
```
"policyArn": "string",
"policyName": "string"
}
}
,"missingContextValues": [ "string" ]
]
}

Response Elements

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

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

authResults (p. 508)

The authentication results.

Type: Array of AuthResult (p. 673) objects

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

LimitExceeded Exception

A limit has been exceeded.

HTTP Status Code: 410

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ServiceUnavailableException

The service is temporarily unavailable.

HTTP Status Code: 503

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 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
TestInvokeAuthorizer

Service: AWS IoT

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

Request Syntax

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

{
    "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 uses the following URI parameters.

**authorizerName (p. 511)**

The custom authorizer name.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**httpContext (p. 511)**

Specifies a test HTTP authorization request.

Type: HttpContext (p. 724) object

Required: No

**mqttContext (p. 511)**

Specifies a test MQTT authorization request.
Type: MqttContext (p. 760) object

Required: No

tlsContext (p. 511)

Specifies a test TLS authorization request.

Type: TlsContext (p. 839) object

Required: No

token (p. 511)

The token returned by your custom authentication service.

Type: String


Required: No

tokenSignature (p. 511)

The signature made with the token and your custom authentication service's private key. This value must be Base-64-encoded.

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

{
    "disconnectAfterIn Seconds": number,
    "isAuthenticated": boolean,
    "policyDocuments": [ "string" ],
    "principalId": "string",
    "refreshAfterIn Seconds": 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.

disconnectAfterIn Seconds (p. 512)

The number of seconds after which the connection is terminated.

Type: Integer

isAuthenticated (p. 512)

True if the token is authenticated, otherwise false.
Type: Boolean

`policyDocuments (p. 512)`
IAM policy documents.
Type: Array of strings

`principalId (p. 512)`
The principal ID.
Type: String
Pattern: `[a-zA-Z0-9]+`

`refreshAfterInSeconds (p. 512)`
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: 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
TransferCertificate

Service: AWS IoT

Transfers the specified certificate to the specified AWS account.

You can cancel the transfer until it is acknowledged by the recipient.

No notification is sent to the transfer destination's account. It is up to the caller to notify the transfer target.

The certificate being transferred must not be in the ACTIVE state. You can use the UpdateCertificate API to deactivate it.

The certificate must not have any policies attached to it. You can use the DetachPrincipalPolicy API to detach them.

Request Syntax

PATCH /transfer-certificate/certificateId?targetAwsAccount=targetAwsAccount HTTP/1.1
Content-type: application/json

{
   "transferMessage": "string"
}

URI Request Parameters

The request uses the following URI parameters.

certificateId (p. 515)

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]+

Required: Yes
targetAwsAccount (p. 515)

The AWS account.

Length Constraints: Fixed length of 12.

Pattern: [0-9]+

Required: Yes

Request Body

The request accepts the following data in JSON format.

transferMessage (p. 515)

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. 516)`

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: 400

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. 518)

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

tagKeys (p. 518)

  A list of the keys of the tags to be removed from the resource.
  Type: Array of strings
  Pattern: ^([^\p{L}\p{Z}\p{N}_.:/=+\-@]*)$
  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: 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
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. 520)`

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. 655)` object map

Required: No

`auditNotificationTargetConfigurations (p. 520)`

Information about the targets to which audit notifications are sent.

Type: String to `AuditNotificationTarget (p. 664)` object map
Valid Keys: SNS

Required: No

roleArn (p. 520)

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: 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
UpdateAuditSuppression
Service: AWS IoT

Updates a Device Defender audit suppression.

Request Syntax

```json
PATCH /audit/suppressions/update HTTP/1.1
Content-type: application/json
{
    "checkName": "string",
    "description": "string",
    "expirationDate": number,
    "resourceIdentifier": {
        "account": "string",
        "caCertificateId": "string",
        "clientId": "string",
        "cognitoIdentityPoolId": "string",
        "deviceCertificateId": "string",
        "iamRoleArn": "string",
        "policyVersionIdentifier": {
            "policyName": "string",
            "policyVersionId": "string"
        },
        "roleAliasArn": "string"
    },
    "suppressIndefinitely": boolean
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**checkName (p. 523)**

An audit check name. 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: String

Required: Yes

**description (p. 523)**

The description of the audit suppression.

Type: String

Length Constraints: Maximum length of 1000.

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

Required: No
expirationDate (p. 523)

The expiration date (epoch timestamp in seconds) that you want the suppression to adhere to.

Type: Timestamp

Required: No

resourceIdentifier (p. 523)

Information that identifies the noncompliant resource.

Type: ResourceIdentifier (p. 787) object

Required: Yes

suppressIndefinitely (p. 523)

Indicates whether a suppression should exist indefinitely or not.

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

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
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 uses the following URI parameters.

**authorizerName** (p. 526)

The authorizer name.


Pattern: [\w=,@-]+

Required: Yes

Request Body

The request accepts the following data in JSON format.

**authorizerFunctionArn** (p. 526)

The ARN of the authorizer's Lambda function.

Type: String

Required: No

**status** (p. 526)

The status of the update authorizer request.

Type: String

Valid Values: ACTIVE | INACTIVE

Required: No

**tokenKeyName** (p. 526)

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

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

tokenSigningPublicKeys (p. 526)
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

```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. 527)
The authorizer ARN.
Type: String

authorizerName (p. 527)
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: 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
UpdateBillingGroup
Service: AWS IoT

Updates information about the billing group.

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

billingGroupName (p. 529)

The name of the billing group.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

billingGroupProperties (p. 529)

The properties of the billing group.

Type: BillingGroupProperties (p. 685) object

Required: Yes

expectedVersion (p. 529)

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. 529)

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: 400

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 uses the following URI parameters.

caCertificateId (p. 532)

The CA certificate identifier.

Length Constraints: Fixed length of 64.

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

Required: Yes

newAutoRegistrationStatus (p. 532)

The new value for the auto registration status. Valid values are: "ENABLE" or "DISABLE".

Valid Values: ENABLE | DISABLE

newStatus (p. 532)

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. 532)

Information about the registration configuration.

Type: RegistrationConfig (p. 783) object

Required: No
removeAutoRegistration (p. 532)

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: 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
UpdateCertificate
Service: AWS IoT

Updates the status of the specified certificate. This operation is idempotent.
Certificates must be in the ACTIVE state to authenticate devices that use a certificate to connect to AWS IoT.

Within a few minutes of updating a certificate from the ACTIVE state to any other state, AWS IoT disconnects all devices that used that certificate to connect. Devices cannot use a certificate that is not in the ACTIVE state to reconnect.

Request Syntax

| PUT /certificates/certificateId?newStatus=newStatus HTTP/1.1 |

URI Request Parameters

The request uses the following URI parameters.

**certificateId (p. 535)**

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]+

Required: Yes

**newStatus (p. 535)**

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

Required: Yes

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: 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
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 uses the following URI parameters.

name (p. 537)

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:_-]+

Required: Yes

Request Body

The request accepts the following data in JSON format.

stringValues (p. 537)

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. 537)

The ARN (Amazon resource name) of the created dimension.

Type: String

creationDate (p. 537)

The date and time, in milliseconds since epoch, when the dimension was initially created.

Type: Timestamp

lastModifiedDate (p. 537)

The date and time, in milliseconds since epoch, when the dimension was most recently updated.

Type: Timestamp

name (p. 537)

A unique identifier for the dimension.

Type: String


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

stringValues (p. 537)

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. 537)

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: 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
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/domainConfigurationName HTTP/1.1
Content-type: application/json

{
    "authorizerConfig": {
        "allowAuthorizerOverride": boolean,
        "defaultAuthorizerName": "string"
    },
    "domainConfigurationStatus": "string",
    "removeAuthorizerConfig": boolean
}
```

**URI Request Parameters**

The request uses the following URI parameters.

**domainConfigurationName (p. 540)**

The name of the domain configuration to be updated.


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

Required: Yes

**Request Body**

The request accepts the following data in JSON format.

**authorizerConfig (p. 540)**

An object that specifies the authorization service for a domain.

Type: AuthorizerConfig (p. 669) object

Required: No

**domainConfigurationStatus (p. 540)**

The status to which the domain configuration should be updated.

Type: String

Valid Values: ENABLED | DISABLED

Required: No
removeAuthorizerConfig (p. 540)

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. 541)
The ARN of the domain configuration that was updated.
Type: String
domainConfigurationName (p. 541)
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: 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
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 uses the following URI parameters.

thingGroupName (p. 543)

The name of the dynamic thing group to update.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

expectedVersion (p. 543)

The expected version of the dynamic thing group to update.

Type: Long

Required: No

indexName (p. 543)

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. 543)**

The dynamic thing group search query string to update.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**queryVersion (p. 543)**

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. 543)**

The dynamic thing group properties to update.

Type: ThingGroupProperties (p. 828) 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. 544)**

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: 400
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
UpdateEventConfigurations
Service: AWS IoT

Updates the event configurations.

Request Syntax

```plaintext
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. 546)**

The new event configuration values.

Type: String to [Configuration (p. 702)] 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: 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
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. 548)**

- Thing group indexing configuration.

  Type: `ThingGroupIndexingConfiguration (p. 826)` object

  Required: No
thingIndexingConfiguration (p. 548)

Thing indexing configuration.

Type: ThingIndexingConfiguration (p. 829) 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: 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
UpdateJob
Service: AWS IoT
Updates supported fields of the specified job.

Request Syntax

```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 uses the following URI parameters.

**jobId (p. 551)**

The ID of the job to be updated.

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

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

Required: Yes

Request Body

The request accepts the following data in JSON format.
**abortConfig (p. 551)**

Allows you to create criteria to abort a job.

Type: AbortConfig (p. 641) object

Required: No

**description (p. 551)**

A short text description of the job.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

Required: No

**jobExecutionsRolloutConfig (p. 551)**

Allows you to create a staged rollout of the job.

Type: JobExecutionsRolloutConfig (p. 737) object

Required: No

**presignedUrlConfig (p. 551)**

Configuration information for pre-signed S3 URLs.

Type: PresignedUrlConfig (p. 773) object

Required: No

**timeoutConfig (p. 551)**

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. 834) 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: 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
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 uses the following URI parameters.

**actionName (p. 554)**

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-_.]+

Required: Yes

Request Body

The request accepts the following data in JSON format.

**actionParams (p. 554)**

Defines the type of action and the parameters for that action.
Type: `MitigationActionParams (p. 758)` object

Required: No

**roleArn (p. 554)**

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. 555)**

The ARN for the new mitigation action.

Type: String

**actionId (p. 555)**

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: 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
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,
  "preProvisioningHook": {
    "payloadVersion": "string",
    "targetArn": "string"
  },
  "provisioningRoleArn": "string",
  "removePreProvisioningHook": boolean
}

URI Request Parameters

The request uses the following URI parameters.

**templateName (p. 557)**

The name of the fleet provisioning template.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**defaultVersionId (p. 557)**

The ID of the default provisioning template version.

Type: Integer

Required: No

**description (p. 557)**

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. 557)

True to enable the fleet provisioning template, otherwise false.

Type: Boolean

Required: No

preProvisioningHook (p. 557)

Updates the pre-provisioning hook template.

Type: ProvisioningHook (p. 774) object

Required: No

provisioningRoleArn (p. 557)

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

Type: String


Required: No

removePreProvisioningHook (p. 557)

Removes pre-provisioning hook template.

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

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

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

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

URI Request Parameters

The request uses the following URI parameters.

**roleAlias (p. 560)**

The role alias to update.

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

Request Body

The request accepts the following data in JSON format.

**credentialDurationSeconds (p. 560)**

The number of seconds the credential will be valid.

- Type: Integer
- Required: No

**roleArn (p. 560)**

The role ARN.

- Type: String
- Required: No

Response Syntax

```
HTTP/1.1 200
```

Content-type: application/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. 560)
The role alias.
Type: String
Pattern: [\w=,\@-]+

roleAliasArn (p. 560)
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: 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
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 uses the following URI parameters.

**scheduledAuditName (p. 563)**

The name of the scheduled audit. (Max. 128 chars)


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**dayOfMonth (p. 563)**

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. 563)**

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. 563)**

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. 563)**

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. 564)**

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: 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
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

```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 uses the following URI parameters.
**expectedVersion (p. 566)**

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. 566)**

The name of the security profile you want to update.


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

Required: Yes

---

**Request Body**

The request accepts the following data in JSON format.

**additionalMetricsToRetain (p. 566)**

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. 567) instead.

Type: Array of strings

Required: No

**additionalMetricsToRetainV2 (p. 566)**

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. 754) objects

Required: No

**alertTargets (p. 566)**

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

Type: String to AlertTarget (p. 649) object map

Valid Keys: SNS

Required: No

**behaviors (p. 566)**

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

Type: Array of Behavior (p. 681) objects

Array Members: Maximum number of 100 items.

Required: No

**deleteAdditionalMetricsToRetain (p. 566)**

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

deleAlertTargets (p. 566)

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

deleBehaviors (p. 566)

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. 566)

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

```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,
```

568
"statisticalThreshold": {
  "statistic": "string"
},
"value": {
  "cidrs": [ "string" ],
  "count": number,
  "ports": [ number ]
},
"metric": "string",
"metricDimension": {
  "dimensionName": "string",
  "operator": "string"
},
"name": "string"
],
"creationDate": number,
"lastModifiedDate": number,
"securityProfileArn": "string",
"securityProfileDescription": "string",
"securityProfileName": "string",
"version": number
}

Response Elements

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

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

additionalMetricsToRetain (p. 568)

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. 569) instead.

Type: Array of strings

additionalMetricsToRetainV2 (p. 568)

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. 754) objects

alertTargets (p. 568)

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

Type: String to AlertTarget (p. 649) object map

Valid Keys: SNS

behaviors (p. 568)

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

Type: Array of Behavior (p. 681) objects

Array Members: Maximum number of 100 items.
creationDate (p. 568)
   The time the security profile was created.
   Type: Timestamp

lastModifiedDate (p. 568)
   The time the security profile was last modified.
   Type: Timestamp

securityProfileArn (p. 568)
   The ARN of the security profile that was updated.
   Type: String

securityProfileDescription (p. 568)
   The description of the security profile.
   Type: String
   Length Constraints: Maximum length of 1000.
   Pattern: \p{Graph}\x20]*

securityProfileName (p. 568)
   The name of the security profile that was updated.
   Type: String
   Pattern: [a-zA-Z0-9_:\-]+

version (p. 568)
   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: 400

**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

```
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 uses the following URI parameters.

**streamId (p. 572)**

The stream ID.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**description (p. 572)**

The description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

Required: No

**files (p. 572)**

The files associated with the stream.
Type: Array of StreamFile (p. 811) objects

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

Required: No

roleArn (p. 572)

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. 573)

A description of the stream.

Type: String

Length Constraints: Maximum length of 2028.

Pattern: [^\p{C}]+

streamArn (p. 573)

The stream ARN.

Type: String

streamId (p. 573)

The stream ID.

Type: String


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

streamVersion (p. 573)

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: 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
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 uses the following URI parameters.

thingName (p. 575)

The name of the thing to update.

You can't change a thing's name. To change a thing's name, you must create a new thing, give it the new name, and then delete the old thing.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

attributePayload (p. 575)

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. 654) object

Required: No

expectedVersion (p. 575)

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. 575)
Remove a thing type association. If true, the association is removed.
Type: Boolean
Required: No

thingTypeName (p. 575)
The name of the thing type.
Type: String
Pattern: [a-zA-Z0-9:_-]+
Required: No

Response Syntax

HTTP/1.1 200

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

Errors

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

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

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

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

ThrottlingException
The rate exceeds the limit.
HTTP Status Code: 400
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 uses the following URI parameters.

thingGroupName (p. 578)
The thing group to update.
Pattern: [a-zA-Z0-9-_]+
Required: Yes

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

expectedVersion (p. 578)
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. 578)
The thing group properties.
Type: ThingGroupProperties (p. 828) 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. 579)

   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: 400

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. 581)

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. 581)

The groups to which the thing will be added.

Type: Array of strings


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

Required: No

thingGroupsToRemove (p. 581)

The groups from which the thing will be removed.

Type: Array of strings


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

Required: No

thingName (p. 581)

The thing whose group memberships will be updated.
UpdateThingGroupsForThing

Type: String


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

Required: No

Response Syntax

HTTP/1.1 200

Response Elements

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

Errors

InternalFailureException

An unexpected error has occurred.

HTTP Status Code: 500

InvalidRequestException

The request is not valid.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource does not exist.

HTTP Status Code: 404

ThrottlingException

The rate exceeds the limit.

HTTP Status Code: 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
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

 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. 584)

The ARN of the topic rule destination.

Type: String

Required: Yes

status (p. 584)

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

584
Valid Values: ENABLED | IN_PROGRESS | DISABLED | ERROR

Required: Yes

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
ValidateSecurityProfileBehaviors

Service: AWS IoT

Validates a Device Defender security profile behaviors specification.

Request Syntax

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

```
{
  "behaviors": [
    {
      "criteria": {
        "comparisonOperator": "string",
        "consecutiveDatapointsToAlarm": number,
        "consecutiveDatapointsToClear": number,
        "durationSeconds": number,
        "statisticalThreshold": {
          "statistic": "string"
        },
        "value": {
          "cidrs": [ "string" ],
          "count": number,
          "ports": [ number ]
        }
      },
      "metric": "string",
      "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. 587)**

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

Type: Array of **Behavior (p. 681)** objects

Array Members: Maximum number of 100 items.

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json
{
  "valid": boolean,
  "validationErrors": [
    {
      "errorMessage": "string"
    }
  ]
}

Response Elements

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

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

valid (p. 587)

True if the behaviors were valid.
Type: Boolean

validationErrors (p. 587)

The list of any errors found in the behaviors.
Type: Array of ValidationError (p. 853) 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: 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 IoT Data Plane

The following actions are supported by AWS IoT Data Plane:

- DeleteThingShadow (p. 590)
- GetThingShadow (p. 593)
- ListNamedShadowsForThing (p. 596)
- Publish (p. 599)
- UpdateThingShadow (p. 601)
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?name=shadowName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

**shadowName (p. 590)**

The name of the shadow.

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

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

**thingName (p. 590)**

The name of the thing.


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

Required: Yes

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. 590)**

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?name=shadowName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

shadowName (p. 593)

The name of the shadow.

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

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

thingName (p. 593)

The name of the thing.


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

Required: Yes

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. 593)

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
ListNamedShadowsForThing

Service: AWS IoT Data Plane

Lists the shadows for the specified thing.

Request Syntax

GET /api/things/shadow/ListNamedShadowsForThing/thingName?
nextToken=nextToken&pageSize=pageSize HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

nextToken (p. 596)

The token to retrieve the next set of results.

pageSize (p. 596)

The result page size.

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

thingName (p. 596)

The name of the thing.


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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "nextToken": "string",
    "results": [ "string" ],
    "timestamp": 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. 596)

The token for the next set of results, or null if there are no additional results.
results (p. 596)

The list of shadows for the specified thing.

Type: Array of strings

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

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

timestamp (p. 596)

The Epoch date and time the response was generated by AWS IoT.

Type: Long

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

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS 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 in the AWS IoT Developer Guide.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

qos (p. 599)
The Quality of Service (QoS) level.
Valid Range: Minimum value of 0. Maximum value of 1.
topic (p. 599)
The name of the MQTT topic.
Required: Yes

Request Body

The request accepts the following binary data.
payload (p. 599)
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?name=shadowName HTTP/1.1
payload

URI Request Parameters

The request uses the following URI parameters.

shadowName (p. 601)

The name of the shadow.

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

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

thingName (p. 601)

The name of the thing.


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

Required: Yes

Request Body

The request accepts the following binary data.

payload (p. 601)

The state information, in JSON format.

Required: Yes

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. 601)**

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 IoT Jobs Data Plane

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

- DescribeJobExecution (p. 604)
- GetPendingJobExecutions (p. 607)
- StartNextPendingJobExecution (p. 610)
- UpdateJobExecution (p. 613)
DescribeJobExecution
Service: AWS IoT Jobs Data Plane

Gets details of a job execution.

Request Syntax

GET /things/thingName/jobs/jobId?
exe executionNumber=executionNumber&includeJobDocument=includeJobDocument HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

executionNumber (p. 604)
Optional. A number that identifies a particular job execution on a particular device. If not specified, the latest job execution is returned.

includeJobDocument (p. 604)
Optional. Unless set to false, the response contains the job document. The default is true.

jobId (p. 604)
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-]+|$next
Required: Yes

thingName (p. 604)
The thing name associated with the device the job execution is running on.
Pattern: [a-zA-Z0-9-]+?
Required: Yes

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. 604)

Contains data about a job execution.

Type: JobExecution (p. 856) 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 uses the following URI parameters.

**thingName (p. 607)**

The name of the thing that is executing the job.


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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

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

Response Elements

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

**inProgressJobs (p. 607)**

A list of JobExecutionSummary objects with status IN_PROGRESS.

Type: Array of JobExecutionSummary (p. 860) objects

**queuedJobs (p. 607)**

A list of JobExecutionSummary objects with status QUEUED.

Type: Array of JobExecutionSummary (p. 860) 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

```
PUT /things/thingName/jobs/#next HTTP/1.1
Content-type: application/json

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

URI Request Parameters

The request uses the following URI parameters.

**thingName (p. 610)**

The name of the thing associated with the device.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**statusDetails (p. 610)**

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. 610)**

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. 611)**

A JobExecution object.

Type: `JobExecution (p. 856)` 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

Updates the status of a job execution.

Request Syntax

```json
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 uses the following URI parameters.

**jobId (p. 613)**

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-_]+

Required: Yes

**thingName (p. 613)**

The name of the thing associated with the device.


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

Required: Yes

Request Body

The request accepts the following data in JSON format.

**executionNumber (p. 613)**

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

Type: Long

Required: No
expectedVersion (p. 613)

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. 613)

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

Type: Boolean

Required: No

includeJobExecutionState (p. 613)

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

Type: Boolean

Required: No

status (p. 613)

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. 613)

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. 613)

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. 615)**

A JobExecutionState object.

Type: JobExecutionState (p. 859) object

**jobDocument (p. 615)**

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
InvalidStateException

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. 617)
- DescribeTunnel (p. 619)
- ListTagsForResource (p. 621)
- ListTunnels (p. 623)
- OpenTunnel (p. 625)
- TagResource (p. 628)
- UntagResource (p. 630)
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. 870).

The request accepts the following data in JSON format.

**delete** *(p. 617)*

When set to true, AWS IoT Secure Tunneling deletes the tunnel data immediately.

Type: Boolean

Required: No

**tunnelId** *(p. 617)*

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

```json
{
  "tunnelId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 870).

The request accepts the following data in JSON format.

tunnelId (p. 619)

The tunnel to describe.

Type: String

Pattern: [a-zA-Z0-9_\-+=:]{1,128}

Required: Yes

Response Syntax

```json
{
  "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",
  }
}
```
"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. 619)

The tunnel being described.

Type: Tunnel (p. 866) 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. 870).

The request accepts the following data in JSON format.

resourceArn (p. 621)
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. 621)
The tags for the specified resource.

Type: Array of Tag (p. 864) 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

```json
{
   "maxResults": number,
   "nextToken": "string",
   "thingName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 870).

The request accepts the following data in JSON format.

**maxResults (p. 623)**

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. 623)**

A token to retrieve the next set of results.

Type: String

Pattern: `[a-zA-Z0-9_-]{1,4096}`

Required: No

**thingName (p. 623)**

The name of the IoT thing associated with the destination device.

Type: String


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

Required: No

Response Syntax

```json
{
   "nextToken": "string",
   "tunnelSummaries": [
```
Response Elements

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. 623)

A token to used to retrieve the next set of results.

Type: String

Pattern: [a-zA-Z0-9_=-]{1,4096}

tunnelSummaries (p. 623)

A short description of the tunnels in an AWS account.

Type: Array of TunnelSummary (p. 868) 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

```
{
   "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. 870).

The request accepts the following data in JSON format.

**description (p. 625)**

A short text description of the tunnel.

Type: String

Pattern: `[^\p{C}]{1,2048}`

Required: No

**destinationConfig (p. 625)**

The destination configuration for the OpenTunnel request.

Type: DestinationConfig (p. 863) object

Required: No

**tags (p. 625)**

A collection of tag metadata.

Type: Array of Tag (p. 864) objects

Array Members: Minimum number of 1 item. Maximum number of 200 items.

Required: No

**timeoutConfig (p. 625)**

Timeout configuration for a tunnel.
Response Syntax

```json
{
    "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. 626)**

The access token the destination local proxy uses to connect to AWS IoT Secure Tunneling.

Type: String

**sourceAccessToken (p. 626)**

The access token the source local proxy uses to connect to AWS IoT Secure Tunneling.

Type: String

**tunnelArn (p. 626)**

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. 626)**

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. 870).

The request accepts the following data in JSON format.

resourceArn (p. 628)

The ARN of the resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes
tags (p. 628)

The tags for the resource.

Type: Array of Tag (p. 864) 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

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 870).

The request accepts the following data in JSON format.

**resourceArn (p. 630)**

The resource ARN.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 1011.
Required: Yes

**tagKeys (p. 630)**

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}_.:/=+\-@]*)$ 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. 641)
- AbortCriteria (p. 642)
- Action (p. 643)
- ActiveViolation (p. 646)
- AddThingsToThingGroupParams (p. 648)
- AlertTarget (p. 649)
- Allowed (p. 650)
- AssetPropertyTimestamp (p. 651)
- AssetPropertyValue (p. 652)
- AssetPropertyVariant (p. 653)
- AttributePayload (p. 654)
- AuditCheckConfiguration (p. 655)
- AuditCheckDetails (p. 656)
- AuditFinding (p. 658)
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- AuditMitigationActionsTaskMetadata (p. 662)
- AuditMitigationActionsTaskTarget (p. 663)
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- AuditTaskMetadata (p. 667)
- AuthInfo (p. 668)
- AuthorizerConfig (p. 669)
- AuthorizerDescription (p. 670)
- AuthorizerSummary (p. 672)
- AuthResult (p. 673)
- AwsJobAbortConfig (p. 674)
- AwsJobAbortCriteria (p. 675)
- AwsJobExecutionsRolloutConfig (p. 676)
- AwsJobExponentialRolloutRate (p. 677)
- AwsJobPresignedUrlConfig (p. 678)
- AwsJobRatelIncreaseCriteria (p. 679)
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- Behavior (p. 681)
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- BillingGroupMetadata (p. 684)
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- Certificate (p. 689)
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• DomainConfigurationSummary (p. 706)
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• DynamoDBv2Action (p. 709)
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• ElasticsearchAction (p. 711)
• EnableIoTLoggingParams (p. 712)
• ErrorInfo (p. 713)
• ExplicitDeny (p. 714)
• ExponentialRolloutRate (p. 715)
• Field (p. 716)
• FileLocation (p. 717)
• FirehoseAction (p. 718)
• GroupNameAndArn (p. 719)
• HttpAction (p. 720)
• HttpActionHeader (p. 722)
• HttpAuthorization (p. 723)
• HttpContext (p. 724)
• HttpUrlDestinationConfiguration (p. 725)
• HttpUrlDestinationProperties (p. 726)
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• UpdateCACertificateParams (p. 851)
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• ViolationEvent (p. 854)

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

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

• JobExecution (p. 856)
• JobExecutionState (p. 859)
• JobExecutionSummary (p. 860)
The following data types are supported by AWS IoT Secure Tunneling:

- ConnectionState (p. 862)
- DestinationConfig (p. 863)
- Tag (p. 864)
- TimeoutConfig (p. 865)
- Tunnel (p. 866)
- TunnelSummary (p. 868)

AWS IoT

The following data types are supported by AWS IoT:

- AbortConfig (p. 641)
- AbortCriteria (p. 642)
- Action (p. 643)
- ActiveViolation (p. 646)
- AddThingsToThingGroupParams (p. 648)
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- Allowed (p. 650)
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- CodeSigningCertificateChain (p. 700)
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- EffectivePolicy (p. 710)
- ElasticsearchAction (p. 711)
- EnableIoTLoggingParams (p. 712)
- ErrorInfo (p. 713)
- ExplicitDeny (p. 714)
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- HttpActionHeader (p. 722)
- HttpAuthorization (p. 723)
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- IotAnalyticsAction (p. 729)
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• TopicRuleListItem (p. 847)
• TopicRulePayload (p. 848)
• TransferData (p. 850)
• UpdateCACertificateParams (p. 851)
• UpdateDeviceCertificateParams (p. 852)
• ValidationError (p. 853)
• ViolationEvent (p. 854)
AbortConfig
Service: AWS IoT

The criteria that determine when and how a job abort takes place.

Contents

criteriaList

The list of criteria that determine when and how to abort the job.

Type: Array of AbortCriteria (p. 642) 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

The criteria that determine when and how a job abort takes place.

Contents

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

failureType
The type of job execution failures that can initiate a job abort.
Type: String
Valid Values: FAILED | REJECTED | TIMED_OUT | ALL
Required: Yes

minNumberOfExecutedThings
The minimum number of things which must receive job execution notifications before the job can be aborted.
Type: Integer
Valid Range: Minimum value of 1.
Required: Yes

thresholdPercentage
The minimum percentage of job execution failures that must occur to initiate the 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. 695)` object
  Required: No

- **cloudwatchLogs**
  Send data to CloudWatch Logs.
  Type: `CloudwatchLogsAction (p. 696)` object
  Required: No

- **cloudwatchMetric**
  Capture a CloudWatch metric.
  Type: `CloudwatchMetricAction (p. 697)` object
  Required: No

- **dynamoDB**
  Write to a DynamoDB table.
  Type: `DynamoDBAction (p. 707)` 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. 709)` object
  Required: No

- **elasticsearch**
  Write data to an Amazon Elasticsearch Service domain.
  Type: `ElasticsearchAction (p. 711)` object
  Required: No

- **firehose**
  Write to an Amazon Kinesis Firehose stream.
  Type: `FirehoseAction (p. 718)` object
  Required: No
http
Send data to an HTTPS endpoint.
Type: `HttpAction (p. 720)` object
Required: No

`iotAnalytics`
Sends message data to an AWS IoT Analytics channel.
Type: `IotAnalyticsAction (p. 729)` object
Required: No

`iotEvents`
Sends an input to an AWS IoT Events detector.
Type: `IotEventsAction (p. 730)` object
Required: No

`iotSiteWise`
Sends data from the MQTT message that triggered the rule to AWS IoT SiteWise asset properties.
Type: `IotSiteWiseAction (p. 731)` object
Required: No

`kinesis`
Write data to an Amazon Kinesis stream.
Type: `KinesisAction (p. 748)` object
Required: No

`lambda`
Invoke a Lambda function.
Type: `LambdaAction (p. 749)` object
Required: No

`republish`
Publish to another MQTT topic.
Type: `RepublishAction (p. 786)` object
Required: No

`s3`
Write to an Amazon S3 bucket.
Type: `S3Action (p. 791)` object
Required: No

`salesforce`
Send a message to a Salesforce IoT Cloud Input Stream.
Type: SalesforceAction (p. 794) object
Required: No

sns
Publish to an Amazon SNS topic.
Type: SnsAction (p. 803) object
Required: No

sqs
Publish to an Amazon SQS queue.
Type: SqsAction (p. 804) object
Required: No

stepFunctions
Starts execution of a Step Functions state machine.
Type: StepFunctionsAction (p. 809) object
Required: No

timestream
The Timestream rule action writes attributes (measures) from an MQTT message into an Amazon Timestream table. For more information, see the Timestream topic rule action documentation.
Type: TimestreamAction (p. 835) 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. 681) 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. 755) 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

Service: AWS IoT

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 (p. 770) 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

650
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

timInSeconds

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. 651) object
Required: Yes

value
The value of the asset property.

Type: AssetPropertyVariant (p. 653) 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:

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

Type: String to string map

Key Length Constraints: Maximum length of 128.

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

Value Length Constraints: Maximum length of 800.

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

Required: No

merge

Specifies whether the list of attributes provided in the AttributePayload is merged with the attributes stored in the registry, instead of overwriting them.

To remove an attribute, call UpdateThing with an empty attribute value.

**Note**
The merge attribute is only valid when calling UpdateThing 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

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

eroerrorCode

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

suppressedNonCompliantResourcesCount

Describes how many of the non-compliant resources created during the evaluation of an audit check were marked as suppressed.

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: [\sa-zA-Z0-9_-]+

Required: No

findingTime

The time the result (finding) was discovered.

Type: Timestamp

Required: No

isSuppressed

Indicates whether the audit finding was suppressed or not during reporting.

Type: Boolean

Required: No

nonCompliantResource

The resource that was found to be noncompliant with the audit check.

Type: NonCompliantResource (p. 761) 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. 784) 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

d 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: IN_PROGRESS | COMPLETED | FAILED | CANCELED | SKIPPED | 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
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
AuditSuppression
Service: AWS IoT

Filters out specific findings of a Device Defender audit.

Contents

cHECKNAME

An audit check name. 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: String
Required: Yes
description

The description of the audit suppression.

Type: String
Length Constraints: Maximum length of 1000.
Pattern: \[\p{Graph}\x20]*
Required: No
exPIRATIONDATE

The expiration date (epoch timestamp in seconds) that you want the suppression to adhere to.

Type: Timestamp
Required: No
resourceIdentifier

Information that identifies the noncompliant resource.

Type: ResourceIdentifier (p. 787) object
Required: Yes
suppressIndefinitely

Indicates whether a suppression should exist indefinitely or not.

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
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: 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
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

authorizerFunctionArn
The authorizer's Lambda function ARN.
Type: String
Required: No

authorizerName
The authorizer name.
Type: String
Pattern: [\w=,\@-]+
Required: No

creationDate
The UNIX timestamp of when the authorizer was created.
Type: Timestamp
Required: No

lastModifiedDate
The UNIX timestamp of when the authorizer was last updated.
Type: Timestamp
Required: No

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. 650) 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. 668) object
Required: No

denied
The policies and statements that denied the specified action.
Type: Denied (p. 704) 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
**AwsJobAbortConfig**

Service: AWS IoT

The criteria that determine when and how a job abort takes place.

**Contents**

**abortCriteriaList**

The list of criteria that determine when and how to abort the job.

Type: Array of `AwsJobAbortCriteria` (p. 675) 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
**AwsJobAbortCriteria**

Service: AWS IoT

The criteria that determine when and how a job abort takes place.

**Contents**

**action**

The type of job action to take to initiate the job abort.

- Type: String
- Valid Values: CANCEL
- Required: Yes

**failureType**

The type of job execution failures that can initiate a job abort.

- Type: String
- Valid Values: FAILED | REJECTED | TIMED_OUT | ALL
- Required: Yes

**minNumberOfExecutedThings**

The minimum number of things which must receive job execution notifications before the job can be aborted.

- Type: Integer
- Valid Range: Minimum value of 1.
- Required: Yes

**thresholdPercentage**

The minimum percentage of job execution failures that must occur to initiate the 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
AwsJobExecutionsRolloutConfig

Service: AWS IoT

Configuration for the rollout of OTA updates.

Contents

exponentialRate

The rate of increase for a job rollout. This parameter allows you to define an exponential rate increase for a job rollout.

Type: AwsJobExponentialRolloutRate (p. 677) object

Required: No

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
**AwsJobExponentialRolloutRate**

Service: AWS IoT

The rate of increase for a job rollout. This parameter allows you to define an exponential rate increase for a job rollout.

**Contents**

**baseRatePerMinute**

The minimum number of things that will be notified of a pending job, per minute, at the start of the job rollout. This is the initial rate of the rollout.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: Yes

**incrementFactor**

The rate of increase for a job rollout. The number of things notified is multiplied by this factor.

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: AwsJobRateIncreaseCriteria (p. 679) 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
AwsJobPresignedUrlConfig
Service: AWS IoT

Configuration information for pre-signed URLs. Valid when protocol contains HTTP.

Contents

expiresInSec

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
**AwsJobRateIncreaseCriteria**

Service: AWS IoT

The criteria to initiate the increase in rate of rollout for a job.

**Contents**

**numberOfNotifiedThings**

When this number of things have been notified, it will initiate an increase in the rollout rate.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

**numberOfSucceededThings**

When this number of things have succeeded in their job execution, it will initiate an increase in the rollout rate.

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
**AwsJobTimeoutConfig**

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
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. 682) 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. 753) 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. 806) object

Required: No
value
    The value to be compared with the metric.
    Type: MetricValue (p. 755) 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-fA-F0-9]+

Required: No

certificatePem

The CA certificate data, in PEM format.

Type: String


Required: No

creationDate

The date the CA certificate was created.

Type: Timestamp

Required: No

customerVersion

The customer version of the CA certificate.

Type: Integer

Valid Range: Minimum value of 1.
Required: No

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

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

ownedBy
The owner of the CA certificate.
Type: String
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. 694) 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

certificateMode
The mode of the certificate.
Type: String
Valid Values: DEFAULT | SNI_ONLY
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

cacertificateId
The certificate ID of the CA certificate used to sign this certificate.
Type: String
Length Constraints: Fixed length of 64.
Pattern: (0x)?[a-fA-F0-9]+
Required: No
certificateArn
The ARN of the certificate.
Type: String
Required: No
certificateId
The ID of the certificate.
Type: String
Length Constraints: Fixed length of 64.
Pattern: (0x)?[a-fA-F0-9]+
Required: No
certificateMode
The mode of the certificate.
Type: String
Valid Values: DEFAULT | SNI_ONLY
Required: No
certificatePem
The certificate data, in PEM format.
Type: String
Required: No
creationDate
The date and time the certificate was created.
Type: Timestamp
customerVersion

The customer version of the certificate.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

generationId

The generation ID of the certificate.

Type: String

Required: No

lastModifiedDate

The date and time the certificate was last modified.

Type: Timestamp

Required: No

ownedBy

The ID of the AWS account that owns the certificate.

Type: String

Length Constraints: Fixed length of 12.

Pattern: [0-9]+

Required: No

previousOwnedBy

The ID of the AWS account of the previous owner of the certificate.

Type: String

Length Constraints: Fixed length of 12.

Pattern: [0-9]+

Required: No

status

The status of the certificate.

Type: String

Valid Values: ACTIVE | INACTIVE | REVOKED | PENDING_TRANSFER | REGISTER_INACTIVE | PENDING_ACTIVATION

Required: No

transferData

The transfer data.
Type: TransferData (p. 850) object

Required: No

validity

When the certificate is valid.

Type: CertificateValidity (p. 694) 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
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. 703) object

Required: No

startSigningJobParameter

Describes the code-signing job.

Type: StartSigningJobParameter (p. 805) 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. 700) 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. 701) 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. 714) 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. 728) 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. 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
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, dbc123defghi.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.
DynamoDBAction

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 its own column in the DynamoDB table.

Contents

putItem

Specifies the DynamoDB table to which the message data will be written. For example:

```
{ "dynamoDBv2": { "roleArn": "aws:iam:12341251:my-role" "putItem":
    { "tableName": "my-table" } } }
```

Each attribute in the message payload will be written to a separate column in the DynamoDB database.

Type: PutItemInput (p. 781) 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

element
  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

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. 770) 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. 782) 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. 793) object
Required: No

stream
The stream that contains the OTA update.
Type: Stream (p. 810) 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

groupName
The group name.
Type: String
Pattern: [\da-zA-Z0-9_:\-]+
Required: No

groupArn
The group 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
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. 723) 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. 722) 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. 802) 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. 770) 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. 779) 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
The `Job` object contains details about a job.

**Contents**

`abortConfig`
- Configuration for criteria to abort the job.
- Type: `AbortConfig (p. 641)` 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. 737)` 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. 743)` 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. 773)` 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.

Length Constraints: Maximum length of 2048.

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. 834) 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. 738) object

Required: No

thingArn

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

Type: String

Required: No

versionNumber

The version of the job execution. Job execution versions are incremented each time they are updated by a device.

Type: Long

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**JobExecutionsRolloutConfig**

Service: AWS IoT

Allows you to create a staged rollout of a job.

**Contents**

**exponentialRate**

The rate of increase for a job rollout. This parameter allows you to define an exponential rate for a job rollout.

Type: `ExponentialRolloutRate (p. 715)` 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. 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
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. 739) 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. 739) 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. 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
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. 753) 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. 758) 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. 648) object
Required: No
enableIoTLoggingParams
Parameters to define a mitigation action that enables AWS IoT logging at a specified level of detail.
Type: EnableIoTLoggingParams (p. 712) 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. 778) object
Required: No
replaceDefaultPolicyVersionParams
Parameters to define a mitigation action that adds a blank policy to restrict permissions.
Type: ReplaceDefaultPolicyVersionParams (p. 785) object
Required: No
updateCACertificateParams
Parameters to define a mitigation action that changes the state of the CA certificate to inactive.
Type: UpdateCACertificateParams (p. 851) object
Required: No
updateDeviceCertificateParams
Parameters to define a mitigation action that changes the state of the device certificate to inactive.
Type: UpdateDeviceCertificateParams (p. 852) 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. 787) 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. 699) object
Required: No

fileLocation

The location of the updated firmware.
Type: FileLocation (p. 717) 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. 676) object
Required: No

awsJobPresignedUrlConfig
Configuration information for pre-signed URLs. Valid when protocols contains HTTP.
Type: AwsJobPresignedUrlConfig (p. 678) 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}]+
OTAUpdateInfo

- **errorInfo**
  - Error information associated with the OTA update.
  - Type: ErrorInfo (p. 713) 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. 762) 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.
OTAUpdateInfo

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-fA-F0-9]+
  Required: No

creationDate
  The certificate creation date.
  Type: Timestamp
  Required: No

transferDate
  The date the transfer was initiated.
  Type: Timestamp
  Required: No

transferMessage
  The transfer message.
  Type: String
  Length Constraints: Maximum length of 128.
  Required: No

transferredTo
  The AWS account to which the transfer was made.
  Type: String
  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
ProvisioningHook

Service: AWS IoT

Structure that contains payloadVersion and targetArn.

Contents

payloadVersion

The payload that was sent to the target function.

Note: Only Lambda functions are currently supported.

Type: String


Pattern: `^[0-9-]+$`

Required: No

targetArn

The ARN of the target function.

Note: Only Lambda functions are currently supported.

Type: String

Length Constraints: Maximum length of 2048.

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
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.

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. 652) 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
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. 787) 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]+
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]+
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]+
Required: No

iamRoleArn
The ARN of the IAM role that has overly permissive actions.
Type: String

Required: No

**policyVersionIdentifier**

The version of the policy associated with the resource.

Type: PolicyVersionIdentifier (p. 772) 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

prefix

The S3 prefix.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for 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-]+\.((sfdc-matrix\.net)|(sfdcnow\.com))/streams/\w{1,20}/\w{1,20}/event

Required: Yes

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby 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: ^([1-9]|[12][0-9]|3[01])$|^LAST$

Required: No
dayOfWeek

The day of the week on which the scheduled audit is run (if the frequency is "WEEKLY" or "BIWEEKLY").

Type: String

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

Required: No

frequency

How often the scheduled audit 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. 797) object

Required: No

target

Information about the target (thing group) associated with the security profile.

Type: SecurityProfileTarget (p. 798) 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{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. 705) object

Required: No

signingProfileName

The code-signing profile name.

Type: String

Required: No

signingProfileParameter

Describes the code-signing profile.

Type: SigningProfileParameter (p. 801) 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.
See Also

For more information about using this API in one of 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. 793) 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. 811) objects
   Array Members: Minimum number of 1 item. Maximum number of 50 items.
   Required: No

lastUpdatedAt
   The date when the stream was last updated.
   Type: Timestamp
   Required: No

roleArn
   An IAM role AWS IoT assumes to access your S3 files.
   Type: String
   Required: No

streamArn
   The stream ARN.
   Type: String
   Required: No

streamId
   The stream ID.
StreamInfo

Type: String


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

Required: No

streamVersion

The stream version.

Type: Integer

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

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for 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
Pattern: ^([\p{L}\p{Z}\p{N}\._:/=+\-@]*)$ Required: Yes

Value
The tag's value.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.
Required: No

See Also
For more information about using this API in one of 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. 821)` 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. 716) 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. 716) 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` 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. 654) 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. 716) 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. 716) 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. 832) 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. 833) 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
TimestreamAction
Service: AWS IoT

The Timestream rule action writes attributes (measures) from an MQTT message into an Amazon Timestream table. For more information, see the Timestream topic rule action documentation.

Contents

databaseName
The name of an Amazon Timestream database.

Type: String
Required: Yes

dimensions
Metadata attributes of the time series that are written in each measure record.

Type: Array of TimestreamDimension (p. 837) objects

Array Members: Minimum number of 1 item. Maximum number of 128 items.
Required: Yes

roleArn
The ARN of the role that grants permission to write to the Amazon Timestream database table.

Type: String
Required: Yes

tableName
The name of the database table into which to write the measure records.

Type: String
Required: Yes

timestamp
Specifies an application-defined value to replace the default value assigned to the Timestream record's timestamp in the `time` column.

You can use this property to specify the value and the precision of the Timestream record's timestamp. You can specify a value from the message payload or a value computed by a substitution template.

If omitted, the topic rule action assigns the timestamp, in milliseconds, at the time it processed the rule.

Type: TimestreamTimestamp (p. 838) 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
TimestreamDimension

Service: AWS IoT

Metadata attributes of the time series that are written in each measure record.

Contents

name

The metadata dimension name. This is the name of the column in the Amazon Timestream database table record.

Dimensions cannot be named: measure_name, measure_value, or time. These names are reserved. Dimension names cannot start with ts_ or measure_value and they cannot contain the colon (:) character.

Type: String

Required: Yes

value

The value to write in this column of the database record.

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
TimestreamTimestamp

Service: AWS IoT

Describes how to interpret an application-defined timestamp value from an MQTT message payload and the precision of that value.

Contents

unit

The precision of the timestamp value that results from the expression described in value.

Valid values: SECONDS | MILLISECONDS | MICROSECONDS | NANOSECONDS. The default is MILLISECONDS.

Type: String

Required: Yes

value

An expression that returns a long epoch time value.

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
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. 643) 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. 643) 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](#) 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. 725) 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. 727) 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
**TopicRuleListItem**

Service: AWS IoT

Describes a rule.

**Contents**

- **createdAt**
  - The date and time the rule was created.
  - Type: Timestamp
  - Required: No

- **ruleArn**
  - The rule ARN.
  - Type: String
  - Required: No

- **ruleDisabled**
  - Specifies whether the rule is disabled.
  - Type: Boolean
  - Required: No

- **ruleName**
  - The name of the rule.
  - Type: String
  - Pattern: ^[a-zA-Z0-9_]+$
  - Required: No

- **topicPattern**
  - The pattern for the topic names that apply.
  - Type: String
  - Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V3
**TopicRulePayload**

Service: AWS IoT

Describes a rule.

**Contents**

**actions**

The actions associated with the rule.

Type: Array of Action (p. 643) objects

Array Members: Minimum number of 0 items. Maximum number of 10 items.

Required: Yes

**awsIotSqlVersion**

The version of the SQL rules engine to use when evaluating the rule.

Type: String

Required: No

**description**

The description of the rule.

Type: String

Required: No

**errorAction**

The action to take when an error occurs.

Type: Action (p. 643) object

Required: No

**ruleDisabled**

Specifies whether the rule is disabled.

Type: Boolean

Required: No

**sql**

The SQL statement used to query the topic. For more information, see AWS IoT SQL Reference in the AWS IoT Developer Guide.

Type: String

Required: Yes

**See Also**

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

- AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java
• AWS SDK for Ruby 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
UpdateCA CertificateParams
Service: AWS IoT

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. 681) object
Required: No

metricValue

The value of the metric (the measurement).

Type: MetricValue (p. 755) 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. 856)
- JobExecutionState (p. 859)
- JobExecutionSummary (p. 860)
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. 862)
- DestinationConfig (p. 863)
- Tag (p. 864)
- TimeoutConfig (p. 865)
- Tunnel (p. 866)
- TunnelSummary (p. 868)
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 identity 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. 863)` object

Required: No

`destinationConnectionState`

The connection state of the destination application.

Type: `ConnectionState (p. 862)` 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. 862)` object

Required: No

`status`

The status of a tunnel. Valid values are: Open and Closed.

Type: String

Valid Values: OPEN | CLOSED
Required: No

tags
A list of tag metadata associated with the secure tunnel.
Type: Array of Tag (p. 864) objects
Array Members: Minimum number of 1 item. Maximum number of 200 items.
Required: No
timeoutConfig
Timeout configuration for the tunnel.
Type: TimeoutConfig (p. 865) 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 Tunneleing

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.

For more information, see Task 2: Create a String to Sign for Signature Version 4 in the Amazon Web Services General Reference.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

**X-Amz-Date**

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is
not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Handling Dates in Signature Version 4 in the Amazon Web Services General Reference.

Type: string
Required: Conditional

**X-Amz-Security-Token**

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS Security Token Service, go to AWS Services That Work with IAM in the IAM User Guide.

Condition: If you're using temporary security credentials from the AWS Security Token Service, you must include the security token.

Type: string
Required: Conditional

**X-Amz-Signature**

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string
Required: Conditional

**X-Amz-SignedHeaders**

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Task 1: Create a Canonical Request For Signature Version 4 in the Amazon Web Services General Reference.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string
Required: Conditional