



API Reference

AWS IoT Events Data



API Version 2018-10-23

Copyright © 2025 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

AWS IoT Events Data: API Reference

Copyright © 2025 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

Amazon's trademarks and trade dress may not be used in connection with any product or service that is not Amazon's, in any manner that is likely to cause confusion among customers, or in any manner that disparages or discredits Amazon. All other trademarks not owned by Amazon are the property of their respective owners, who may or may not be affiliated with, connected to, or sponsored by Amazon.

Table of Contents

Welcome	1
Actions	2
BatchAcknowledgeAlarm	3
Request Syntax	3
URI Request Parameters	3
Request Body	3
Response Syntax	4
Response Elements	4
Errors	4
See Also	5
BatchDeleteDetector	6
Request Syntax	6
URI Request Parameters	6
Request Body	6
Response Syntax	7
Response Elements	7
Errors	7
See Also	8
BatchDisableAlarm	9
Request Syntax	9
URI Request Parameters	9
Request Body	9
Response Syntax	10
Response Elements	10
Errors	10
See Also	11
BatchEnableAlarm	12
Request Syntax	12
URI Request Parameters	12
Request Body	12
Response Syntax	13
Response Elements	13
Errors	13
See Also	14

BatchPutMessage	15
Request Syntax	15
URI Request Parameters	16
Request Body	16
Response Syntax	16
Response Elements	16
Errors	17
See Also	17
BatchResetAlarm	19
Request Syntax	19
URI Request Parameters	19
Request Body	19
Response Syntax	20
Response Elements	20
Errors	20
See Also	21
BatchSnoozeAlarm	22
Request Syntax	22
URI Request Parameters	22
Request Body	22
Response Syntax	23
Response Elements	23
Errors	23
See Also	24
BatchUpdateDetector	25
Request Syntax	25
URI Request Parameters	26
Request Body	26
Response Syntax	26
Response Elements	26
Errors	27
See Also	27
DescribeAlarm	29
Request Syntax	29
URI Request Parameters	29
Request Body	29

Response Syntax	30
Response Elements	31
Errors	31
See Also	32
DescribeDetector	33
Request Syntax	33
URI Request Parameters	33
Request Body	33
Response Syntax	34
Response Elements	34
Errors	35
See Also	35
ListAlarms	37
Request Syntax	37
URI Request Parameters	37
Request Body	37
Response Syntax	38
Response Elements	38
Errors	38
See Also	39
ListDetectors	41
Request Syntax	41
URI Request Parameters	41
Request Body	42
Response Syntax	42
Response Elements	42
Errors	43
See Also	43
Data Types	45
AcknowledgeActionConfiguration	47
Contents	47
See Also	47
AcknowledgeAlarmActionRequest	48
Contents	48
See Also	49
Alarm	50

Contents	50
See Also	51
AlarmState	52
Contents	52
See Also	53
AlarmSummary	54
Contents	54
See Also	55
BatchAlarmActionErrorEntry	57
Contents	57
See Also	58
BatchDeleteDetectorErrorEntry	59
Contents	59
See Also	59
BatchPutMessageErrorEntry	61
Contents	61
See Also	61
BatchUpdateDetectorErrorEntry	63
Contents	63
See Also	63
CustomerAction	65
Contents	65
See Also	66
DeleteDetectorRequest	67
Contents	67
See Also	68
Detector	69
Contents	69
See Also	70
DetectorState	71
Contents	71
See Also	71
DetectorStateDefinition	72
Contents	72
See Also	72
DetectorStateSummary	74

Contents	74
See Also	74
DetectorSummary	75
Contents	75
See Also	76
DisableActionConfiguration	77
Contents	77
See Also	77
DisableAlarmActionRequest	78
Contents	78
See Also	79
EnableActionConfiguration	80
Contents	80
See Also	80
EnableAlarmActionRequest	81
Contents	81
See Also	82
Message	83
Contents	83
See Also	84
ResetActionConfiguration	85
Contents	85
See Also	85
ResetAlarmActionRequest	86
Contents	86
See Also	87
RuleEvaluation	88
Contents	88
See Also	88
SimpleRuleEvaluation	89
Contents	89
See Also	89
SnoozeActionConfiguration	91
Contents	91
See Also	91
SnoozeAlarmActionRequest	92

Contents	92
See Also	93
StateChangeConfiguration	94
Contents	94
See Also	94
SystemEvent	95
Contents	95
See Also	95
Timer	96
Contents	96
See Also	96
TimerDefinition	97
Contents	97
See Also	97
TimestampValue	98
Contents	98
See Also	98
UpdateDetectorRequest	99
Contents	99
See Also	100
Variable	101
Contents	101
See Also	101
VariableDefinition	102
Contents	102
See Also	102
Common Parameters	103
Common Errors	106

Welcome

AWS IoT Events monitors your equipment or device fleets for failures or changes in operation, and triggers actions when such events occur. You can use AWS IoT Events Data API commands to send inputs to detectors, list detectors, and view or update a detector's status.

For more information, see [What is AWS IoT Events?](#) in the *AWS IoT Events Developer Guide*.

This document was last published on July 25, 2025.

Actions

The following actions are supported:

- [BatchAcknowledgeAlarm](#)
- [BatchDeleteDetector](#)
- [BatchDisableAlarm](#)
- [BatchEnableAlarm](#)
- [BatchPutMessage](#)
- [BatchResetAlarm](#)
- [BatchSnoozeAlarm](#)
- [BatchUpdateDetector](#)
- [DescribeAlarm](#)
- [DescribeDetector](#)
- [ListAlarms](#)
- [ListDetectors](#)

BatchAcknowledgeAlarm

⚠ Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Acknowledges one or more alarms. The alarms change to the ACKNOWLEDGED state after you acknowledge them.

Request Syntax

```
POST /alarms/acknowledge HTTP/1.1
Content-type: application/json

{
  "acknowledgeActionRequestsalarmModelNamekeyValuenoterequestId
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

acknowledgeActionRequests

The list of acknowledge action requests. You can specify up to 10 requests per operation.

Type: Array of [AcknowledgeAlarmActionRequest](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

Response Syntax

```
HTTP/1.1 202
Content-type: application/json
```

```
{
  "errorEntrieserrorCodeerrorMessagerequestId
```

Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

errorEntries

A list of errors associated with the request, or null if there are no errors. Each error entry contains an entry ID that helps you identify the entry that failed.

Type: Array of [BatchAlarmActionErrorEntry](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

BatchDeleteDetector

⚠ Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Deletes one or more detectors that were created. When a detector is deleted, its state will be cleared and the detector will be removed from the list of detectors. The deleted detector will no longer appear if referenced in the [ListDetectors](#) API call.

Request Syntax

```
POST /detectors/delete HTTP/1.1
Content-type: application/json

{
  "detectorsdetectorModelNamekeyValuemessageId
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

detectors

The list of one or more detectors to be deleted.

Type: Array of [DeleteDetectorRequest](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

Response Syntax

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

{
  "batchDeleteDetectorErrorEntries": [
    {
      "errorCode": "string",
      "errorMessage": "string",
      "messageId": "string"
    }
  ]
}
```

Response Elements

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

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

[batchDeleteDetectorErrorEntries](#)

A list of errors associated with the request, or an empty array ([]) if there are no errors. Each error entry contains a messageId that helps you identify the entry that failed.

Type: Array of [BatchDeleteDetectorErrorEntry](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

BatchDisableAlarm

⚠ Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Disables one or more alarms. The alarms change to the DISABLED state after you disable them.

Request Syntax

```
POST /alarms/disable HTTP/1.1
Content-type: application/json

{
  "disableActionRequestsalarmModelNamekeyValuenoterequestId
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

disableActionRequests

The list of disable action requests. You can specify up to 10 requests per operation.

Type: Array of [DisableAlarmActionRequest](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

Response Syntax

```
HTTP/1.1 202
Content-type: application/json
```

```
{
  "errorEntrieserrorCodeerrorMessagerequestId
```

Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

errorEntries

A list of errors associated with the request, or null if there are no errors. Each error entry contains an entry ID that helps you identify the entry that failed.

Type: Array of [BatchAlarmActionErrorEntry](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

BatchEnableAlarm

⚠ Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Enables one or more alarms. The alarms change to the NORMAL state after you enable them.

Request Syntax

```
POST /alarms/enable HTTP/1.1
Content-type: application/json

{
  "enableActionRequests": [
    {
      "alarmModelName": "string",
      "keyValue": "string",
      "note": "string",
      "requestId": "string"
    }
  ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

enableActionRequests

The list of enable action requests. You can specify up to 10 requests per operation.

Type: Array of [EnableAlarmActionRequest](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

Response Syntax

```
HTTP/1.1 202
Content-type: application/json
```

```
{
  "errorEntrieserrorCodeerrorMessagerequestId
```

Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

errorEntries

A list of errors associated with the request, or null if there are no errors. Each error entry contains an entry ID that helps you identify the entry that failed.

Type: Array of [BatchAlarmActionErrorEntry](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

BatchPutMessage

⚠ Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Sends a set of messages to the AWS IoT Events system. Each message payload is transformed into the input you specify ("inputName") and ingested into any detectors that monitor that input. If multiple messages are sent, the order in which the messages are processed isn't guaranteed. To guarantee ordering, you must send messages one at a time and wait for a successful response.

The following limits apply:

- Maximum messages per batch: 10
- Maximum message payload per batch: 1024 Bytes (1 KiB)

Request Syntax

```
POST /inputs/messages HTTP/1.1
Content-type: application/json
```

```
{
  "messages": [
    {
      "inputName": "string",
      "messageId": "string",
      "payload": blob,
      "timestamp": {
        "timeInMillis": number
      }
    }
  ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

messages

The list of messages to send. Each message has the following format: ' { "messageId": "string", "inputName": "string", "payload": "string"}'

Type: Array of [Message](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

Response Syntax

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

{
  "BatchPutMessageErrorEntries": [
    {
      "errorCodeerrorMessage messageId
```

Response Elements

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

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

[BatchPutMessageErrorEntries](#)

A list of any errors encountered when sending the messages.

Type: Array of [BatchPutMessageErrorEntry](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)

- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

BatchResetAlarm

⚠ Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Resets one or more alarms. The alarms return to the NORMAL state after you reset them.

Request Syntax

```
POST /alarms/reset HTTP/1.1
Content-type: application/json

{
  "resetActionRequestsalarmModelNamekeyValuenoterequestId
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

resetActionRequests

The list of reset action requests. You can specify up to 10 requests per operation.

Type: Array of [ResetAlarmActionRequest](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

Response Syntax

```
HTTP/1.1 202
Content-type: application/json
```

```
{
  "errorEntrieserrorCodeerrorMessagerequestId
```

Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

errorEntries

A list of errors associated with the request, or null if there are no errors. Each error entry contains an entry ID that helps you identify the entry that failed.

Type: Array of [BatchAlarmActionErrorEntry](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

BatchSnoozeAlarm

⚠ Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Changes one or more alarms to the snooze mode. The alarms change to the SNOOZE_DISABLED state after you set them to the snooze mode.

Request Syntax

```
POST /alarms/snooze HTTP/1.1
Content-type: application/json

{
  "snoozeActionRequests": [
    {
      "alarmModelName": "string",
      "keyValue": "string",
      "note": "string",
      "requestId": "string",
      "snoozeDuration": number
    }
  ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

snoozeActionRequests

The list of snooze action requests. You can specify up to 10 requests per operation.

Type: Array of [SnoozeAlarmActionRequest](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

Response Syntax

```
HTTP/1.1 202
Content-type: application/json

{
  "errorEntries": [
    {
      "errorCodeerrorMessagerequestId
```

Response Elements

If the action is successful, the service sends back an HTTP 202 response.

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

[errorEntries](#)

A list of errors associated with the request, or null if there are no errors. Each error entry contains an entry ID that helps you identify the entry that failed.

Type: Array of [BatchAlarmActionErrorEntry](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

BatchUpdateDetector

⚠ Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Updates the state, variable values, and timer settings of one or more detectors (instances) of a specified detector model.

Request Syntax

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

{
  "detectors": [
    {
      "detectorModelName": "string",
      "keyValue": "string",
      "messageId": "string",
      "state": {
        "stateName": "string",
        "timers": [
          {
            "name": "string",
            "seconds": number
          }
        ],
        "variables": [
          {
            "name": "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.

detectors

The list of detectors (instances) to update, along with the values to update.

Type: Array of [UpdateDetectorRequest](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

Response Syntax

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

{
  "batchUpdateDetectorErrorEntries": [
    {
      "errorCode": "string",
      "errorMessage": "string",
      "messageId": "string"
    }
  ]
}
```

Response Elements

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

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

batchUpdateDetectorErrorEntries

A list of those detector updates that resulted in errors. (If an error is listed here, the specific update did not occur.)

Type: Array of [BatchUpdateDetectorErrorEntry](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)

- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeAlarm

Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Retrieves information about an alarm.

Request Syntax

```
GET /alarms/alarmModelName/keyValues/?keyValue=keyValue HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

alarmModelName

The name of the alarm model.

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

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

Required: Yes

keyValue

The value of the key used as a filter to select only the alarms associated with the [key](#).

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

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

Request Body

The request does not have a request body.

Response Syntax

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

{
  "alarm": {
    "alarmModelName": "string",
    "alarmModelVersion": "string",
    "alarmState": {
      "customerAction": {
        "acknowledgeActionConfiguration": {
          "note": "string"
        },
        "actionName": "string",
        "disableActionConfiguration": {
          "note": "string"
        },
        "enableActionConfiguration": {
          "note": "string"
        },
        "resetActionConfiguration": {
          "note": "string"
        },
        "snoozeActionConfiguration": {
          "note": "string",
          "snoozeDuration": number
        }
      },
      "ruleEvaluation": {
        "simpleRuleEvaluation": {
          "inputPropertyValue": "string",
          "operator": "string",
          "thresholdValue": "string"
        }
      },
      "stateName": "string",
      "systemEvent": {
        "eventType": "string",
        "stateChangeConfiguration": {
          "triggerType": "string"
        }
      }
    }
  }
}
```

```
    },
    "creationTime": number,
    "keyValue": "string",
    "lastUpdateTime": number,
    "severity": 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.

[alarm](#)

Contains information about an alarm.

Type: [Alarm](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ResourceNotFoundException

The resource was not found.

HTTP Status Code: 404

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeDetector

Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Returns information about the specified detector (instance).

Request Syntax

```
GET /detectors/detectorModelName/keyValues/?keyValue=keyValue HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[detectorModelName](#)

The name of the detector model whose detectors (instances) you want information about.

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

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

Required: Yes

[keyValue](#)

A filter used to limit results to detectors (instances) created because of the given key ID.

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

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

Request Body

The request does not have a request body.

Response Syntax

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

{
  "detector": {
    "creationTime": number,
    "detectorModelName": "string",
    "detectorModelVersion": "string",
    "keyValue": "string",
    "lastUpdateTime": number,
    "state": {
      "stateName": "string",
      "timers": [
        {
          "name": "string",
          "timestamp": number
        }
      ],
      "variables": [
        {
          "name": "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.

[detector](#)

Information about the detector (instance).

Type: [Detector](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ResourceNotFoundException

The resource was not found.

HTTP Status Code: 404

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListAlarms

⚠ Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Lists one or more alarms. The operation returns only the metadata associated with each alarm.

Request Syntax

```
GET /alarms/alarmModelName?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

alarmModelName

The name of the alarm model.

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

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

Required: Yes

maxResults

The maximum number of results to be returned per request.

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

nextToken

The token that you can use to return 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

{
    "alarmSummaries": [
        {
            "alarmModelName": "string",
            "alarmModelVersion": "string",
            "creationTime": number,
            "keyValue": "string",
            "lastUpdateTime": number,
            "stateName": "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.

alarmSummaries

A list that summarizes each alarm.

Type: Array of [AlarmSummary](#) objects

nextToken

The token that you can use to return the next set of results, or null if there are no more results.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ResourceNotFoundException

The resource was not found.

HTTP Status Code: 404

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)

- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListDetectors

⚠ Important

End of support notice: On May 20,2026, AWS will end support for AWS IoT Events. After May 20,2026, you will no longer be able to access the AWS IoT Events console or AWS IoT Events resources. For more information, see [AWS IoT Events end of support](#).

Lists detectors (the instances of a detector model).

Request Syntax

```
GET /detectors/detectorModelName?  
maxResults=maxResults&nextToken=nextToken&stateName=stateName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[detectorModelName](#)

The name of the detector model whose detectors (instances) are listed.

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

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

Required: Yes

[maxResults](#)

The maximum number of results to be returned per request.

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

[nextToken](#)

The token that you can use to return the next set of results.

[stateName](#)

A filter that limits results to those detectors (instances) in the given state.

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

Request Body

The request does not have a request body.

Response Syntax

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

{
  "detectorSummariescreationTimenumber,
      "detectorModelNamestring",
      "detectorModelVersionstring",
      "keyValuestring",
      "lastUpdateTimenumber,
      "statestateNamestring"
      }
    }
  ],
  "nextTokenstring"
}
```

Response Elements

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

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

detectorSummaries

A list of summary information about the detectors (instances).

Type: Array of [DetectorSummary](#) objects

nextToken

The token that you can use to return the next set of results, or null if there are no more results.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InternalFailureException

An internal failure occurred.

HTTP Status Code: 500

InvalidRequestException

The request was invalid.

HTTP Status Code: 400

ResourceNotFoundException

The resource was not found.

HTTP Status Code: 404

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)

- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

Data Types

The AWS IoT Events Data API contains several data types that various actions use. This section describes each data type in detail.

 **Note**

The order of each element in a data type structure is not guaranteed. Applications should not assume a particular order.

The following data types are supported:

- [AcknowledgeActionConfiguration](#)
- [AcknowledgeAlarmActionRequest](#)
- [Alarm](#)
- [AlarmState](#)
- [AlarmSummary](#)
- [BatchAlarmActionErrorEntry](#)
- [BatchDeleteDetectorErrorEntry](#)
- [BatchPutMessageErrorEntry](#)
- [BatchUpdateDetectorErrorEntry](#)
- [CustomerAction](#)
- [DeleteDetectorRequest](#)
- [Detector](#)
- [DetectorState](#)
- [DetectorStateDefinition](#)
- [DetectorStateSummary](#)
- [DetectorSummary](#)
- [DisableActionConfiguration](#)
- [DisableAlarmActionRequest](#)
- [EnableActionConfiguration](#)
- [EnableAlarmActionRequest](#)

- [Message](#)
- [ResetActionConfiguration](#)
- [ResetAlarmActionRequest](#)
- [RuleEvaluation](#)
- [SimpleRuleEvaluation](#)
- [SnoozeActionConfiguration](#)
- [SnoozeAlarmActionRequest](#)
- [StateChangeConfiguration](#)
- [SystemEvent](#)
- [Timer](#)
- [TimerDefinition](#)
- [TimestampValue](#)
- [UpdateDetectorRequest](#)
- [Variable](#)
- [VariableDefinition](#)

AcknowledgeActionConfiguration

Contains the configuration information of an acknowledge action.

Contents

note

The note that you can leave when you acknowledge the alarm.

Type: String

Length Constraints: 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

AcknowledgeAlarmActionRequest

Information needed to acknowledge the alarm.

Contents

alarmModelName

The name of the alarm model.

Type: String

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

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

Required: Yes

requestId

The request ID. Each ID must be unique within each batch.

Type: String

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

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

Required: Yes

keyValue

The value of the key used as a filter to select only the alarms associated with the [key](#).

Type: String

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

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

Required: No

note

The note that you can leave when you acknowledge the alarm.

Type: String

Length Constraints: 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

Alarm

Contains information about an alarm.

Contents

alarmmodelName

The name of the alarm model.

Type: String

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

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

Required: No

alarmModelVersion

The version of the alarm model.

Type: String

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

Required: No

alarmState

Contains information about the current state of the alarm.

Type: [AlarmState](#) object

Required: No

creationTime

The time the alarm was created, in the Unix epoch format.

Type: Timestamp

Required: No

keyValue

The value of the key used as a filter to select only the alarms associated with the [key](#).

Type: String

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

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

Required: No

lastUpdateTime

The time the alarm was last updated, in the Unix epoch format.

Type: Timestamp

Required: No

severity

A non-negative integer that reflects the severity level of the alarm.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 2147483647.

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

AlarmState

Contains information about the current state of the alarm.

Contents

customerAction

Contains information about the action that you can take to respond to the alarm.

Type: [CustomerAction](#) object

Required: No

ruleEvaluation

Information needed to evaluate data.

Type: [RuleEvaluation](#) object

Required: No

stateName

The name of the alarm state. The state name can be one of the following values:

- DISABLED - When the alarm is in the DISABLED state, it isn't ready to evaluate data. To enable the alarm, you must change the alarm to the NORMAL state.
- NORMAL - When the alarm is in the NORMAL state, it's ready to evaluate data.
- ACTIVE - If the alarm is in the ACTIVE state, the alarm is invoked.
- ACKNOWLEDGED - When the alarm is in the ACKNOWLEDGED state, the alarm was invoked and you acknowledged the alarm.
- SNOOZE_DISABLED - When the alarm is in the SNOOZE_DISABLED state, the alarm is disabled for a specified period of time. After the snooze time, the alarm automatically changes to the NORMAL state.
- LATCHED - When the alarm is in the LATCHED state, the alarm was invoked. However, the data that the alarm is currently evaluating is within the specified range. To change the alarm to the NORMAL state, you must acknowledge the alarm.

Type: String

Valid Values: DISABLED | NORMAL | ACTIVE | ACKNOWLEDGED | SNOOZE_DISABLED | LATCHED

Required: No

systemEvent

Contains information about alarm state changes.

Type: [SystemEvent](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

AlarmSummary

Contains a summary of an alarm.

Contents

alarmModelName

The name of the alarm model.

Type: String

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

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

Required: No

alarmModelVersion

The version of the alarm model.

Type: String

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

Required: No

creationTime

The time the alarm was created, in the Unix epoch format.

Type: Timestamp

Required: No

keyValue

The value of the key used as a filter to select only the alarms associated with the [key](#).

Type: String

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

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

Required: No

lastUpdateTime

The time the alarm was last updated, in the Unix epoch format.

Type: Timestamp

Required: No

stateName

The name of the alarm state. The state name can be one of the following values:

- DISABLED - When the alarm is in the DISABLED state, it isn't ready to evaluate data. To enable the alarm, you must change the alarm to the NORMAL state.
- NORMAL - When the alarm is in the NORMAL state, it's ready to evaluate data.
- ACTIVE - If the alarm is in the ACTIVE state, the alarm is invoked.
- ACKNOWLEDGED - When the alarm is in the ACKNOWLEDGED state, the alarm was invoked and you acknowledged the alarm.
- SNOOZE_DISABLED - When the alarm is in the SNOOZE_DISABLED state, the alarm is disabled for a specified period of time. After the snooze time, the alarm automatically changes to the NORMAL state.
- LATCHED - When the alarm is in the LATCHED state, the alarm was invoked. However, the data that the alarm is currently evaluating is within the specified range. To change the alarm to the NORMAL state, you must acknowledge the alarm.

Type: String

Valid Values: DISABLED | NORMAL | ACTIVE | ACKNOWLEDGED | SNOOZE_DISABLED | LATCHED

Required: No

See Also

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

- [AWS SDK for C++](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

BatchAlarmActionErrorEntry

Contains error messages associated with one of the following requests:

- [BatchAcknowledgeAlarm](#)
- [BatchDisableAlarm](#)
- [BatchEnableAlarm](#)
- [BatchResetAlarm](#)
- [BatchSnoozeAlarm](#)

Contents

errorCode

The error code.

Type: String

Valid Values: ResourceNotFoundException | InvalidRequestException | InternalFailureException | ServiceUnavailableException | ThrottlingException

Required: No

errorMessage

A message that describes the error.

Type: String

Required: No

requestId

The request ID. Each ID must be unique within each batch.

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

BatchDeleteDetectorErrorEntry

Contains error messages associated with the deletion request.

Contents

errorCode

The error code.

Type: String

Valid Values: ResourceNotFoundException | InvalidRequestException
| InternalFailureException | ServiceUnavailableException |
ThrottlingException

Required: No

errorMessage

A message that describes the error.

Type: String

Required: No

messageId

The ID of the message that caused the error. (See the value of the "messageId" in the [detectors](#) object of the DeleteDetectorRequest.)

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

BatchPutMessageErrorEntry

Contains information about the errors encountered.

Contents

errorCode

The error code.

Type: String

Valid Values: ResourceNotFoundException | InvalidRequestException
| InternalFailureException | ServiceUnavailableException |
ThrottlingException

Required: No

errorMessage

A message that describes the error.

Type: String

Required: No

messageId

The ID of the message that caused the error. (See the value corresponding to the "messageId" key in the "message" object.)

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

BatchUpdateDetectorErrorEntry

Information about the error that occurred when attempting to update a detector.

Contents

errorCode

The error code.

Type: String

Valid Values: ResourceNotFoundException | InvalidRequestException
| InternalFailureException | ServiceUnavailableException |
ThrottlingException

Required: No

errorMessage

A message that describes the error.

Type: String

Required: No

messageId

The "messageId" of the update request that caused the error. (The value of the "messageId" in the update request "Detector" object.)

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

CustomerAction

Contains information about the action that you can take to respond to the alarm.

Contents

acknowledgeActionConfiguration

Contains the configuration information of an acknowledge action.

Type: [AcknowledgeActionConfiguration](#) object

Required: No

actionName

The name of the action. The action name can be one of the following values:

- SNOOZE - When you snooze the alarm, the alarm state changes to SNOOZE_DISABLED.
- ENABLE - When you enable the alarm, the alarm state changes to NORMAL.
- DISABLE - When you disable the alarm, the alarm state changes to DISABLED.
- ACKNOWLEDGE - When you acknowledge the alarm, the alarm state changes to ACKNOWLEDGED.
- RESET - When you reset the alarm, the alarm state changes to NORMAL.

For more information, see the [AlarmState](#) API.

Type: String

Valid Values: SNOOZE | ENABLE | DISABLE | ACKNOWLEDGE | RESET

Required: No

disableActionConfiguration

Contains the configuration information of a disable action.

Type: [DisableActionConfiguration](#) object

Required: No

enableActionConfiguration

Contains the configuration information of an enable action.

Type: [EnableActionConfiguration](#) object

Required: No

resetActionConfiguration

Contains the configuration information of a reset action.

Type: [ResetActionConfiguration](#) object

Required: No

snoozeActionConfiguration

Contains the configuration information of a snooze action.

Type: [SnoozeActionConfiguration](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

DeleteDetectorRequest

Information used to delete the detector model.

Contents

detectorModelName

The name of the detector model that was used to create the detector instance.

Type: String

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

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

Required: Yes

messageId

The ID to assign to the DeleteDetectorRequest. Each "messageId" must be unique within each batch sent.

Type: String

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

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

Required: Yes

keyValue

The value of the [key](#) used to identify the detector.

Type: String

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

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

Detector

Information about the detector (instance).

Contents

creationTime

The time the detector (instance) was created.

Type: Timestamp

Required: No

detectorModelName

The name of the detector model that created this detector (instance).

Type: String

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

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

Required: No

detectorModelVersion

The version of the detector model that created this detector (instance).

Type: String

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

Required: No

keyValue

The value of the key (identifying the device or system) that caused the creation of this detector (instance).

Type: String

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

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

Required: No

lastUpdateTime

The time the detector (instance) was last updated.

Type: Timestamp

Required: No

state

The current state of the detector (instance).

Type: [DetectorState](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

DetectorState

Information about the current state of the detector instance.

Contents

stateName

The name of the state.

Type: String

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

Required: Yes

timers

The current state of the detector's timers.

Type: Array of [Timer](#) objects

Required: Yes

variables

The current values of the detector's variables.

Type: Array of [Variable](#) objects

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

DetectorStateDefinition

The new state, variable values, and timer settings of the detector (instance).

Contents

stateName

The name of the new state of the detector (instance).

Type: String

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

Required: Yes

timers

The new values of the detector's timers. Any timer whose value isn't specified is cleared, and its timeout event won't occur.

Type: Array of [TimerDefinition](#) objects

Required: Yes

variables

The new values of the detector's variables. Any variable whose value isn't specified is cleared.

Type: Array of [VariableDefinition](#) objects

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

DetectorStateSummary

Information about the detector state.

Contents

stateName

The name of the state.

Type: String

Length Constraints: Minimum length of 1. 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

DetectorSummary

Information about the detector (instance).

Contents

creationTime

The time the detector (instance) was created.

Type: Timestamp

Required: No

detectorModelName

The name of the detector model that created this detector (instance).

Type: String

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

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

Required: No

detectorModelVersion

The version of the detector model that created this detector (instance).

Type: String

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

Required: No

keyValue

The value of the key (identifying the device or system) that caused the creation of this detector (instance).

Type: String

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

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

Required: No

lastUpdateTime

The time the detector (instance) was last updated.

Type: Timestamp

Required: No

state

The current state of the detector (instance).

Type: [DetectorStateSummary](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

DisableActionConfiguration

Contains the configuration information of a disable action.

Contents

note

The note that you can leave when you disable the alarm.

Type: String

Length Constraints: 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

DisableAlarmActionRequest

Information used to disable the alarm.

Contents

alarmModelName

The name of the alarm model.

Type: String

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

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

Required: Yes

requestId

The request ID. Each ID must be unique within each batch.

Type: String

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

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

Required: Yes

keyValue

The value of the key used as a filter to select only the alarms associated with the [key](#).

Type: String

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

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

Required: No

note

The note that you can leave when you disable the alarm.

Type: String

Length Constraints: 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

EnableActionConfiguration

Contains the configuration information of an enable action.

Contents

note

The note that you can leave when you enable the alarm.

Type: String

Length Constraints: 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

EnableAlarmActionRequest

Information needed to enable the alarm.

Contents

alarmModelName

The name of the alarm model.

Type: String

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

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

Required: Yes

requestId

The request ID. Each ID must be unique within each batch.

Type: String

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

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

Required: Yes

keyValue

The value of the key used as a filter to select only the alarms associated with the [key](#).

Type: String

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

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

Required: No

note

The note that you can leave when you enable the alarm.

Type: String

Length Constraints: 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

Message

Information about a message.

Contents

inputName

The name of the input into which the message payload is transformed.

Type: String

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

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

Required: Yes

messageId

The ID to assign to the message. Within each batch sent, each "messageId" must be unique.

Type: String

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

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

Required: Yes

payload

The payload of the message. This can be a JSON string or a Base-64-encoded string representing binary data (in which case you must decode it).

Type: Base64-encoded binary data object

Required: Yes

timestamp

The timestamp associated with the message.

Type: [TimestampValue](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

ResetActionConfiguration

Contains the configuration information of a reset action.

Contents

note

The note that you can leave when you reset the alarm.

Type: String

Length Constraints: 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

ResetAlarmActionRequest

Information needed to reset the alarm.

Contents

alarmModelName

The name of the alarm model.

Type: String

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

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

Required: Yes

requestId

The request ID. Each ID must be unique within each batch.

Type: String

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

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

Required: Yes

keyValue

The value of the key used as a filter to select only the alarms associated with the [key](#).

Type: String

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

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

Required: No

note

The note that you can leave when you reset the alarm.

Type: String

Length Constraints: 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

RuleEvaluation

Information needed to evaluate data.

Contents

simpleRuleEvaluation

Information needed to compare two values with a comparison operator.

Type: [SimpleRuleEvaluation](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

SimpleRuleEvaluation

Information needed to compare two values with a comparison operator.

Contents

inputPropertyValue

The value of the input property, on the left side of the comparison operator.

Type: String

Required: No

operator

The comparison operator.

Type: String

Valid Values: GREATER | GREATER_OR_EQUAL | LESS | LESS_OR_EQUAL | EQUAL | NOT_EQUAL

Required: No

thresholdValue

The threshold value, on the right side of the comparison operator.

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

SnoozeActionConfiguration

Contains the configuration information of a snooze action.

Contents

note

The note that you can leave when you snooze the alarm.

Type: String

Length Constraints: Maximum length of 256.

Required: No

snoozeDuration

The snooze time in seconds. The alarm automatically changes to the NORMAL state after this duration.

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

SnoozeAlarmActionRequest

Information needed to snooze the alarm.

Contents

alarmModelName

The name of the alarm model.

Type: String

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

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

Required: Yes

requestId

The request ID. Each ID must be unique within each batch.

Type: String

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

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

Required: Yes

snoozeDuration

The snooze time in seconds. The alarm automatically changes to the NORMAL state after this duration.

Type: Integer

Required: Yes

keyValue

The value of the key used as a filter to select only the alarms associated with the [key](#).

Type: String

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

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

Required: No

note

The note that you can leave when you snooze the alarm.

Type: String

Length Constraints: 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

StateChangeConfiguration

Contains the configuration information of alarm state changes.

Contents

triggerType

The trigger type. If the value is SNOOZE_TIMEOUT, the snooze duration ends and the alarm automatically changes to the NORMAL state.

Type: String

Valid Values: SNOOZE_TIMEOUT

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

SystemEvent

Contains information about alarm state changes.

Contents

eventType

The event type. If the value is STATE_CHANGE, the event contains information about alarm state changes.

Type: String

Valid Values: STATE_CHANGE

Required: No

stateChangeConfiguration

Contains the configuration information of alarm state changes.

Type: [StateChangeConfiguration](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

Timer

The current state of a timer.

Contents

name

The name of the timer.

Type: String

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

Required: Yes

timestamp

The expiration time for the timer.

Type: Timestamp

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

TimerDefinition

The new setting of a timer.

Contents

name

The name of the timer.

Type: String

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

Required: Yes

seconds

The new setting of the timer (the number of seconds before the timer elapses).

Type: Integer

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

TimestampValue

Contains information about a timestamp.

Contents

timeInMillis

The value of the timestamp, in the Unix epoch format.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 9223372036854775807.

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

UpdateDetectorRequest

Information used to update the detector (instance).

Contents

detectorModelName

The name of the detector model that created the detectors (instances).

Type: String

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

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

Required: Yes

messageId

The ID to assign to the detector update "message". Each "messageId" must be unique within each batch sent.

Type: String

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

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

Required: Yes

state

The new state, variable values, and timer settings of the detector (instance).

Type: [DetectorStateDefinition](#) object

Required: Yes

keyValue

The value of the input key attribute (identifying the device or system) that caused the creation of this detector (instance).

Type: String

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

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

Variable

The current state of the variable.

Contents

name

The name of the variable.

Type: String

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

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

Required: Yes

value

The current value of the variable.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

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 Java V2](#)
- [AWS SDK for Ruby V3](#)

VariableDefinition

The new value of the variable.

Contents

name

The name of the variable.

Type: String

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

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

Required: Yes

value

The new value of the variable.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

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 Java V2](#)
- [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 [Signing AWS API requests in the IAM User Guide](#).

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 [Create a signed AWS API request](#) in the *IAM User Guide*.

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 [Elements of an AWS API request signature](#) in the *IAM User Guide*.

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 STS, see [AWS services that work with IAM](#) in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, 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 [Create a signed AWS API request](#) in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 400

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 400

InternalFailure

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

InvalidAction

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 400

InvalidClientId

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 400

OptInRequired

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

RequestExpired

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

ServiceUnavailable

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationException

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400