API Reference

AWS IoT Events

AWS IoT Events: API Reference

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AWS IoT Events

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 API operations to create, read, update, and delete inputs and detector models, and to list their versions.

AWS IoT Events Data

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*.

Actions

The following actions are supported by AWS IoT Events:

- CreateAlarmModel
- CreateDetectorModel
- CreateInput
- DeleteAlarmModel
- DeleteDetectorModel
- DeleteInput
- DescribeAlarmModel
- DescribeDetectorModel
- DescribeDetectorModelAnalysis
- DescribeInput
- DescribeLoggingOptions
- GetDetectorModelAnalysisResults
- ListAlarmModels
- ListAlarmModelVersions
- ListDetectorModels
- ListDetectorModelVersions
- ListInputRoutings
- ListInputs
- ListTagsForResource
- PutLoggingOptions
- StartDetectorModelAnalysis
- TagResource
- UntagResource
- UpdateAlarmModel
- UpdateDetectorModel
- UpdateInput

The following actions are supported by AWS IoT Events Data:

- BatchAcknowledgeAlarm
- BatchDeleteDetector
- BatchDisableAlarm
- BatchEnableAlarm
- BatchPutMessage
- BatchResetAlarm
- BatchSnoozeAlarm
- BatchUpdateDetector
- DescribeAlarm
- DescribeDetector
- ListAlarms
- ListDetectors

AWS IoT Events

The following actions are supported by AWS IoT Events:

- CreateAlarmModel
- CreateDetectorModel
- CreateInput
- DeleteAlarmModel
- DeleteDetectorModel
- DeleteInput
- DescribeAlarmModel
- DescribeDetectorModel
- DescribeDetectorModelAnalysis
- DescribeInput
- DescribeLoggingOptions
- GetDetectorModelAnalysisResults
- ListAlarmModels

- ListAlarmModelVersions
- ListDetectorModels
- ListDetectorModelVersions
- ListInputRoutings
- ListInputs
- ListTagsForResource
- PutLoggingOptions
- StartDetectorModelAnalysis
- TagResource
- UntagResource
- UpdateAlarmModel
- UpdateDetectorModel
- UpdateInput

CreateAlarmModel

Service: AWS IoT Events

Creates an alarm model to monitor an AWS IoT Events input attribute. You can use the alarm to get notified when the value is outside a specified range. For more information, see Create an alarm model in the *AWS IoT Events Developer Guide*.

Request Syntax

```
POST /alarm-models HTTP/1.1
Content-type: application/json

{
   "alarmCapabilities": {
      "acknowledgeFlow": {
         "enabled": boolean
      },
      "initializationConfiguration": {
         "disabledOnInitialization": boolean
      }
   },
   "alarmEventActions": {
      "alarmActions": [
         {
            "dynamoDB": {
               "hashKeyField": "string",
               "hashKeyType": "string",
               "hashKeyValue": "string",
               "operation": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "payloadField": "string",
               "rangeKeyField": "string",
               "rangeKeyType": "string",
               "rangeKeyValue": "string",
               "tableName": "string"
            },
            "dynamoDBv2": {
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
```

```
            },
            "tableName": "string"
         },
         "firehose": {
            "deliveryStreamName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "separator": "string"
         },
         "iotEvents": {
            "inputName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "iotSiteWise": {
            "assetId": "string",
            "entryId": "string",
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
```

```
            "lambda": {
               "functionArn": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
            },
            "sns": {
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "targetArn": "string"
            },
            "sqs": {
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "queueUrl": "string",
               "useBase64": boolean
            }
         }
      ]
   },
   "alarmModelDescription": "string",
   "alarmModelName": "string",
   "alarmNotification": {
      "notificationActions": [
         {
            "action": {
               "lambdaAction": {
                  "functionArn": "string",
                  "payload": {
                     "contentExpression": "string",
                     "type": "string"
                  }
               }
            },
            "emailConfigurations": [
               {
                  "content": {
                     "additionalMessage": "string",
                     "subject": "string"
```

```
                },
                "from": "string",
                "recipients": {
                   "to": [
                      {
                         "ssoIdentity": {
                            "identityStoreId": "string",
                            "userId": "string"
                         }
                      }
                   ]
                }
             }
          ],
          "smsConfigurations": [
             {
                "additionalMessage": "string",
                "recipients": [
                   {
                      "ssoIdentity": {
                         "identityStoreId": "string",
                         "userId": "string"
                      }
                   }
                ],
                "senderId": "string"
             }
          ]
       }
    ]
 },
 "alarmRule": {
    "simpleRule": {
       "comparisonOperator": "string",
       "inputProperty": "string",
       "threshold": "string"
    }
 },
 "key": "string",
 "roleArn": "string",
 "severity": number,
 "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.

alarmCapabilities

Contains the configuration information of alarm state changes.

Type: AlarmCapabilities object

Required: No

alarmEventActions

Contains information about one or more alarm actions.

Type: AlarmEventActions object

Required: No

alarmModelDescription

A description that tells you what the alarm model detects.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

alarmModelName

A unique name that helps you identify the alarm model. You can't change this name after you create the alarm model.

Type: String

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

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

Required: Yes

alarmNotification

Contains information about one or more notification actions.

Type: AlarmNotification object

Required: No

alarmRule

Defines when your alarm is invoked.

Type: AlarmRule object

Required: Yes

key

An input attribute used as a key to create an alarm. AWS IoT Events routes inputs associated with this key to the alarm.

Type: String

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

Pattern: `^((`[\w\-]+`)|([\w\-]+))(\.((`[\w-]+`)|([\w\-]+)))*$`

Required: No

roleArn

The ARN of the IAM role that allows the alarm to perform actions and access AWS resources. For more information, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Type: String

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

Required: Yes

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

tags

A list of key-value pairs that contain metadata for the alarm model. The tags help you manage the alarm model. For more information, see Tagging your AWS IoT Events resources in the *AWS IoT Events Developer Guide*.

You can create up to 50 tags for one alarm model.

Type: Array of Tag objects

Required: No

Response Syntax

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

{
   "alarmModelArn": "string",
   "alarmModelVersion": "string",
   "creationTime": number,
   "lastUpdateTime": number,
   "status": "string"
}
```

Response Elements

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

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

alarmModelArn

The ARN of the alarm model. For more information, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Type: String

alarmModelVersion

The version of the alarm model.

Type: String

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

creationTime

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

Type: Timestamp

lastUpdateTime

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

Type: Timestamp

status

The status of the alarm model. The status can be one of the following values:

- `ACTIVE` - The alarm model is active and it's ready to evaluate data.
- `ACTIVATING` - AWS IoT Events is activating your alarm model. Activating an alarm model can take up to a few minutes.
- `INACTIVE` - The alarm model is inactive, so it isn't ready to evaluate data. Check your alarm model information and update the alarm model.
- `FAILED` - You couldn't create or update the alarm model. Check your alarm model information and try again.

Type: String

Valid Values: `ACTIVE | ACTIVATING | INACTIVE | FAILED`

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

LimitExceededException

A limit was exceeded.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

CreateDetectorModel

Service: AWS IoT Events

Creates a detector model.

Request Syntax

```
POST /detector-models HTTP/1.1
Content-type: application/json

{
   "detectorModelDefinition": {
      "initialStateName": "string",
      "states": [
         {
            "onEnter": {
               "events": [
                  {
                     "actions": [
                        {
                           "clearTimer": {
                              "timerName": "string"
                           },
                           "dynamoDB": {
                              "hashKeyField": "string",
                              "hashKeyType": "string",
                              "hashKeyValue": "string",
                              "operation": "string",
                              "payload": {
                                 "contentExpression": "string",
                                 "type": "string"
                              },
                              "payloadField": "string",
                              "rangeKeyField": "string",
                              "rangeKeyType": "string",
                              "rangeKeyValue": "string",
                              "tableName": "string"
                           },
                           "dynamoDBv2": {
                              "payload": {
                                 "contentExpression": "string",
                                 "type": "string"
                              },
```

```
            "tableName": "string"
         },
         "firehose": {
            "deliveryStreamName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "separator": "string"
         },
         "iotEvents": {
            "inputName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "iotSiteWise": {
            "assetId": "string",
            "entryId": "string",
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "lambda": {
```

```
                        "functionArn": "string",
                        "payload": {
                           "contentExpression": "string",
                           "type": "string"
                        }
                     },
                     "resetTimer": {
                        "timerName": "string"
                     },
                     "setTimer": {
                        "durationExpression": "string",
                        "seconds": number,
                        "timerName": "string"
                     },
                     "setVariable": {
                        "value": "string",
                        "variableName": "string"
                     },
                     "sns": {
                        "payload": {
                           "contentExpression": "string",
                           "type": "string"
                        },
                        "targetArn": "string"
                     },
                     "sqs": {
                        "payload": {
                           "contentExpression": "string",
                           "type": "string"
                        },
                        "queueUrl": "string",
                        "useBase64": boolean
                     }
                  }
               ],
               "condition": "string",
               "eventName": "string"
            }
         ]
      },
      "onExit": {
         "events": [
            {
               "actions": [
```

```
{
   "clearTimer": {
      "timerName": "string"
   },
   "dynamoDB": {
      "hashKeyField": "string",
      "hashKeyType": "string",
      "hashKeyValue": "string",
      "operation": "string",
      "payload": {
         "contentExpression": "string",
         "type": "string"
      },
      "payloadField": "string",
      "rangeKeyField": "string",
      "rangeKeyType": "string",
      "rangeKeyValue": "string",
      "tableName": "string"
   },
   "dynamoDBv2": {
      "payload": {
         "contentExpression": "string",
         "type": "string"
      },
      "tableName": "string"
   },
   "firehose": {
      "deliveryStreamName": "string",
      "payload": {
         "contentExpression": "string",
         "type": "string"
      },
      "separator": "string"
   },
   "iotEvents": {
      "inputName": "string",
      "payload": {
         "contentExpression": "string",
         "type": "string"
      }
   },
   "iotSiteWise": {
      "assetId": "string",
      "entryId": "string",
```

```
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "lambda": {
            "functionArn": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "resetTimer": {
            "timerName": "string"
         },
         "setTimer": {
            "durationExpression": "string",
            "seconds": number,
            "timerName": "string"
         },
         "setVariable": {
            "value": "string",
            "variableName": "string"
         },
         "sns": {
            "payload": {
```

```
                        "contentExpression": "string",
                        "type": "string"
                     },
                     "targetArn": "string"
                  },
                  "sqs": {
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     },
                     "queueUrl": "string",
                     "useBase64": boolean
                  }
               }
            ],
            "condition": "string",
            "eventName": "string"
         }
      ]
   },
   "onInput": {
      "events": [
         {
            "actions": [
               {
                  "clearTimer": {
                     "timerName": "string"
                  },
                  "dynamoDB": {
                     "hashKeyField": "string",
                     "hashKeyType": "string",
                     "hashKeyValue": "string",
                     "operation": "string",
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     },
                     "payloadField": "string",
                     "rangeKeyField": "string",
                     "rangeKeyType": "string",
                     "rangeKeyValue": "string",
                     "tableName": "string"
                  },
                  "dynamoDBv2": {
```

```
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "tableName": "string"
         },
         "firehose": {
            "deliveryStreamName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "separator": "string"
         },
         "iotEvents": {
            "inputName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "iotSiteWise": {
            "assetId": "string",
            "entryId": "string",
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
```

```
                        "type": "string"
                     }
                  },
                  "lambda": {
                     "functionArn": "string",
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     }
                  },
                  "resetTimer": {
                     "timerName": "string"
                  },
                  "setTimer": {
                     "durationExpression": "string",
                     "seconds": number,
                     "timerName": "string"
                  },
                  "setVariable": {
                     "value": "string",
                     "variableName": "string"
                  },
                  "sns": {
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     },
                     "targetArn": "string"
                  },
                  "sqs": {
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     },
                     "queueUrl": "string",
                     "useBase64": boolean
                  }
               }
            ],
            "condition": "string",
            "eventName": "string"
         }
      ],
      "transitionEvents": [
```

```
{
   "actions": [
      {
         "clearTimer": {
            "timerName": "string"
         },
         "dynamoDB": {
            "hashKeyField": "string",
            "hashKeyType": "string",
            "hashKeyValue": "string",
            "operation": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "payloadField": "string",
            "rangeKeyField": "string",
            "rangeKeyType": "string",
            "rangeKeyValue": "string",
            "tableName": "string"
         },
         "dynamoDBv2": {
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "tableName": "string"
         },
         "firehose": {
            "deliveryStreamName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "separator": "string"
         },
         "iotEvents": {
            "inputName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "iotSiteWise": {
```

```
            "assetId": "string",
            "entryId": "string",
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "lambda": {
            "functionArn": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "resetTimer": {
            "timerName": "string"
         },
         "setTimer": {
            "durationExpression": "string",
            "seconds": number,
            "timerName": "string"
         },
         "setVariable": {
            "value": "string",
            "variableName": "string"
         },
```

```
                        "sns": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "targetArn": "string"
                        },
                        "sqs": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "queueUrl": "string",
                           "useBase64": boolean
                        }
                     }
                  ],
                  "condition": "string",
                  "eventName": "string",
                  "nextState": "string"
               }
            ]
         },
         "stateName": "string"
      }
   ]
},
"detectorModelDescription": "string",
"detectorModelName": "string",
"evaluationMethod": "string",
"key": "string",
"roleArn": "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.

detectorModelDefinition

Information that defines how the detectors operate.

Type: DetectorModelDefinition object

Required: Yes

detectorModelDescription

A brief description of the detector model.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

detectorModelName

The name of the detector model.

Type: String

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

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

Required: Yes

evaluationMethod

Information about the order in which events are evaluated and how actions are executed.

Default: `BATCH`

Type: String

Valid Values: `BATCH | SERIAL`

Required: No

key

The input attribute key used to identify a device or system to create a detector (an instance of the detector model) and then to route each input received to the appropriate detector (instance). This parameter uses a JSON-path expression in the message payload of each input to specify the attribute-value pair that is used to identify the device associated with the input.

Type: String

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

Pattern: `^((`[\w\-]+`)|([\w\-]+))(\.((`[\w-]+`)|([\w\-]+)))*$`

Required: No

roleArn

The ARN of the role that grants permission to AWS IoT Events to perform its operations.

Type: String

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

Required: Yes

tags

Metadata that can be used to manage the detector model.

Type: Array of Tag objects

Required: No

Response Syntax

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

{
   "detectorModelConfiguration": {
      "creationTime": number,
      "detectorModelArn": "string",
      "detectorModelDescription": "string",
```

```
      "detectorModelName": "string",
      "detectorModelVersion": "string",
      "evaluationMethod": "string",
      "key": "string",
      "lastUpdateTime": number,
      "roleArn": "string",
      "status": "string"
   }
}
```

Response Elements

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

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

detectorModelConfiguration

Information about how the detector model is configured.

Type: DetectorModelConfiguration 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

LimitExceededException

A limit was exceeded.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

CreateInput

Service: AWS IoT Events

Creates an input.

Request Syntax

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

{
   "inputDefinition": {
      "attributes": [
         {
            "jsonPath": "string"
         }
      ]
   },
   "inputDescription": "string",
   "inputName": "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.

inputDefinition

The definition of the input.

Type: InputDefinition object

Required: Yes

inputDescription

A brief description of the input.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

inputName

The name you want to give to the input.

Type: String

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

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

Required: Yes

tags

Metadata that can be used to manage the input.

Type: Array of Tag objects

Required: No

Response Syntax

```
HTTP/1.1 201
Content-type: application/json

{
   "inputConfiguration": {
      "creationTime": number,
      "inputArn": "string",
      "inputDescription": "string",
      "inputName": "string",
      "lastUpdateTime": number,
      "status": "string"
   }
```

```
}
```

Response Elements

If the action is successful, the service sends back an HTTP 201 response.

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

inputConfiguration

Information about the configuration of the input.

Type: InputConfiguration 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

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteAlarmModel

Service: AWS IoT Events

Deletes an alarm model. Any alarm instances that were created based on this alarm model are also deleted. This action can't be undone.

Request Syntax

```
DELETE /alarm-models/alarmModelName 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

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 204
```

Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

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

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteDetectorModel

Service: AWS IoT Events

Deletes a detector model. Any active instances of the detector model are also deleted.

Request Syntax

```
DELETE /detector-models/detectorModelName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

detectorModelName

The name of the detector model to be deleted.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 204
```

Response Elements

If the action is successful, the service sends back an HTTP 204 response with an empty HTTP body.

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

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteInput

Service: AWS IoT Events

Deletes an input.

Request Syntax

```
DELETE /inputs/inputName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

inputName

The name of the input to delete.

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

Pattern: `^[a-zA-Z][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

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

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DescribeAlarmModel

Service: AWS IoT Events

Retrieves information about an alarm model. If you don't specify a value for the `alarmModelVersion` parameter, the latest version is returned.

Request Syntax

```
GET /alarm-models/alarmModelName?version=alarmModelVersion 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

alarmModelVersion

The version of the alarm model.

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

{
   "alarmCapabilities": {
      "acknowledgeFlow": {
         "enabled": boolean
```

```
      },
      "initializationConfiguration": {
         "disabledOnInitialization": boolean
      }
   },
   "alarmEventActions": {
      "alarmActions": [
         {
            "dynamoDB": {
               "hashKeyField": "string",
               "hashKeyType": "string",
               "hashKeyValue": "string",
               "operation": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "payloadField": "string",
               "rangeKeyField": "string",
               "rangeKeyType": "string",
               "rangeKeyValue": "string",
               "tableName": "string"
            },
            "dynamoDBv2": {
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "tableName": "string"
            },
            "firehose": {
               "deliveryStreamName": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "separator": "string"
            },
            "iotEvents": {
               "inputName": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
```

```
        },
        "iotSiteWise": {
           "assetId": "string",
           "entryId": "string",
           "propertyAlias": "string",
           "propertyId": "string",
           "propertyValue": {
              "quality": "string",
              "timestamp": {
                 "offsetInNanos": "string",
                 "timeInSeconds": "string"
              },
              "value": {
                 "booleanValue": "string",
                 "doubleValue": "string",
                 "integerValue": "string",
                 "stringValue": "string"
              }
           }
        },
        "iotTopicPublish": {
           "mqttTopic": "string",
           "payload": {
              "contentExpression": "string",
              "type": "string"
           }
        },
        "lambda": {
           "functionArn": "string",
           "payload": {
              "contentExpression": "string",
              "type": "string"
           }
        },
        "sns": {
           "payload": {
              "contentExpression": "string",
              "type": "string"
           },
           "targetArn": "string"
        },
        "sqs": {
           "payload": {
              "contentExpression": "string",
```

```
                "type": "string"
            },
            "queueUrl": "string",
            "useBase64": boolean
         }
      }
   ]
},
"alarmModelArn": "string",
"alarmModelDescription": "string",
"alarmModelName": "string",
"alarmModelVersion": "string",
"alarmNotification": {
   "notificationActions": [
      {
         "action": {
            "lambdaAction": {
               "functionArn": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
            }
         },
         "emailConfigurations": [
            {
               "content": {
                  "additionalMessage": "string",
                  "subject": "string"
               },
               "from": "string",
               "recipients": {
                  "to": [
                     {
                        "ssoIdentity": {
                           "identityStoreId": "string",
                           "userId": "string"
                        }
                     }
                  ]
               }
            }
         ],
         "smsConfigurations": [
```

```
                {
                   "additionalMessage": "string",
                   "recipients": [
                      {
                         "ssoIdentity": {
                            "identityStoreId": "string",
                            "userId": "string"
                         }
                      }
                   ],
                   "senderId": "string"
                }
             ]
          }
       ]
    },
    "alarmRule": {
       "simpleRule": {
          "comparisonOperator": "string",
          "inputProperty": "string",
          "threshold": "string"
       }
    },
    "creationTime": number,
    "key": "string",
    "lastUpdateTime": number,
    "roleArn": "string",
    "severity": number,
    "status": "string",
    "statusMessage": "string"
}
```

Response Elements

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

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

alarmCapabilities

Contains the configuration information of alarm state changes.

Type: AlarmCapabilities object

alarmEventActions

Contains information about one or more alarm actions.

Type: AlarmEventActions object

alarmModelArn

The ARN of the alarm model. For more information, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Type: String

alarmModelDescription

The description of the alarm model.

Type: String

Length Constraints: Maximum length of 1024.

alarmModelName

The name of the alarm model.

Type: String

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

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

alarmModelVersion

The version of the alarm model.

Type: String

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

alarmNotification

Contains information about one or more notification actions.

Type: AlarmNotification object

alarmRule

Defines when your alarm is invoked.

Type: AlarmRule object

creationTime

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

Type: Timestamp

key

An input attribute used as a key to create an alarm. AWS IoT Events routes inputs associated with this key to the alarm.

Type: String

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

Pattern: `^((`[\w\-]+`)|([\w\-]+))(\.((`[\w-]+`)|([\w\-]+)))*$`

lastUpdateTime

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

Type: Timestamp

roleArn

The ARN of the IAM role that allows the alarm to perform actions and access AWS resources. For more information, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Type: String

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

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.

status

The status of the alarm model. The status can be one of the following values:

- `ACTIVE` - The alarm model is active and it's ready to evaluate data.

- `ACTIVATING` - AWS IoT Events is activating your alarm model. Activating an alarm model can take up to a few minutes.
- `INACTIVE` - The alarm model is inactive, so it isn't ready to evaluate data. Check your alarm model information and update the alarm model.
- `FAILED` - You couldn't create or update the alarm model. Check your alarm model information and try again.

Type: String

Valid Values: `ACTIVE | ACTIVATING | INACTIVE | FAILED`

statusMessage

Contains information about the status of the alarm model.

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DescribeDetectorModel

Service: AWS IoT Events

Describes a detector model. If the `version` parameter is not specified, information about the latest version is returned.

Request Syntax

```
GET /detector-models/detectorModelName?version=detectorModelVersion HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

detectorModelName

The name of the detector model.

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

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

Required: Yes

detectorModelVersion

The version of the detector model.

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

{
   "detectorModel": {
      "detectorModelConfiguration": {
         "creationTime": number,
```

```
      "detectorModelArn": "string",
      "detectorModelDescription": "string",
      "detectorModelName": "string",
      "detectorModelVersion": "string",
      "evaluationMethod": "string",
      "key": "string",
      "lastUpdateTime": number,
      "roleArn": "string",
      "status": "string"
   },
   "detectorModelDefinition": {
      "initialStateName": "string",
      "states": [
         {
            "onEnter": {
               "events": [
                  {
                     "actions": [
                        {
                           "clearTimer": {
                              "timerName": "string"
                           },
                           "dynamoDB": {
                              "hashKeyField": "string",
                              "hashKeyType": "string",
                              "hashKeyValue": "string",
                              "operation": "string",
                              "payload": {
                                 "contentExpression": "string",
                                 "type": "string"
                              },
                              "payloadField": "string",
                              "rangeKeyField": "string",
                              "rangeKeyType": "string",
                              "rangeKeyValue": "string",
                              "tableName": "string"
                           },
                           "dynamoDBv2": {
                              "payload": {
                                 "contentExpression": "string",
                                 "type": "string"
                              },
                              "tableName": "string"
                           },
```

```
            "firehose": {
               "deliveryStreamName": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "separator": "string"
            },
            "iotEvents": {
               "inputName": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
            },
            "iotSiteWise": {
               "assetId": "string",
               "entryId": "string",
               "propertyAlias": "string",
               "propertyId": "string",
               "propertyValue": {
                  "quality": "string",
                  "timestamp": {
                     "offsetInNanos": "string",
                     "timeInSeconds": "string"
                  },
                  "value": {
                     "booleanValue": "string",
                     "doubleValue": "string",
                     "integerValue": "string",
                     "stringValue": "string"
                  }
               }
            },
            "iotTopicPublish": {
               "mqttTopic": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
            },
            "lambda": {
               "functionArn": "string",
               "payload": {
```

```
                        "contentExpression": "string",
                        "type": "string"
                     }
                  },
                  "resetTimer": {
                     "timerName": "string"
                  },
                  "setTimer": {
                     "durationExpression": "string",
                     "seconds": number,
                     "timerName": "string"
                  },
                  "setVariable": {
                     "value": "string",
                     "variableName": "string"
                  },
                  "sns": {
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     },
                     "targetArn": "string"
                  },
                  "sqs": {
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     },
                     "queueUrl": "string",
                     "useBase64": boolean
                  }
               }
            ],
            "condition": "string",
            "eventName": "string"
         }
      ]
   },
   "onExit": {
      "events": [
         {
            "actions": [
               {
                  "clearTimer": {
```

```
            "timerName": "string"
         },
         "dynamoDB": {
            "hashKeyField": "string",
            "hashKeyType": "string",
            "hashKeyValue": "string",
            "operation": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "payloadField": "string",
            "rangeKeyField": "string",
            "rangeKeyType": "string",
            "rangeKeyValue": "string",
            "tableName": "string"
         },
         "dynamoDBv2": {
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "tableName": "string"
         },
         "firehose": {
            "deliveryStreamName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "separator": "string"
         },
         "iotEvents": {
            "inputName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "iotSiteWise": {
            "assetId": "string",
            "entryId": "string",
            "propertyAlias": "string",
            "propertyId": "string",
```

```
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "lambda": {
            "functionArn": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "resetTimer": {
            "timerName": "string"
         },
         "setTimer": {
            "durationExpression": "string",
            "seconds": number,
            "timerName": "string"
         },
         "setVariable": {
            "value": "string",
            "variableName": "string"
         },
         "sns": {
            "payload": {
               "contentExpression": "string",
               "type": "string"
```

```
                        },
                        "targetArn": "string"
                     },
                     "sqs": {
                        "payload": {
                           "contentExpression": "string",
                           "type": "string"
                        },
                        "queueUrl": "string",
                        "useBase64": boolean
                     }
                  }
               ],
               "condition": "string",
               "eventName": "string"
            }
         ]
      },
      "onInput": {
         "events": [
            {
               "actions": [
                  {
                     "clearTimer": {
                        "timerName": "string"
                     },
                     "dynamoDB": {
                        "hashKeyField": "string",
                        "hashKeyType": "string",
                        "hashKeyValue": "string",
                        "operation": "string",
                        "payload": {
                           "contentExpression": "string",
                           "type": "string"
                        },
                        "payloadField": "string",
                        "rangeKeyField": "string",
                        "rangeKeyType": "string",
                        "rangeKeyValue": "string",
                        "tableName": "string"
                     },
                     "dynamoDBv2": {
                        "payload": {
                           "contentExpression": "string",
```

```
            "type": "string"
         },
         "tableName": "string"
      },
      "firehose": {
         "deliveryStreamName": "string",
         "payload": {
            "contentExpression": "string",
            "type": "string"
         },
         "separator": "string"
      },
      "iotEvents": {
         "inputName": "string",
         "payload": {
            "contentExpression": "string",
            "type": "string"
         }
      },
      "iotSiteWise": {
         "assetId": "string",
         "entryId": "string",
         "propertyAlias": "string",
         "propertyId": "string",
         "propertyValue": {
            "quality": "string",
            "timestamp": {
               "offsetInNanos": "string",
               "timeInSeconds": "string"
            },
            "value": {
               "booleanValue": "string",
               "doubleValue": "string",
               "integerValue": "string",
               "stringValue": "string"
            }
         }
      },
      "iotTopicPublish": {
         "mqttTopic": "string",
         "payload": {
            "contentExpression": "string",
            "type": "string"
         }
```

```
                        },
                        "lambda": {
                           "functionArn": "string",
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           }
                        },
                        "resetTimer": {
                           "timerName": "string"
                        },
                        "setTimer": {
                           "durationExpression": "string",
                           "seconds": number,
                           "timerName": "string"
                        },
                        "setVariable": {
                           "value": "string",
                           "variableName": "string"
                        },
                        "sns": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "targetArn": "string"
                        },
                        "sqs": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "queueUrl": "string",
                           "useBase64": boolean
                        }
                     }
                  ],
                  "condition": "string",
                  "eventName": "string"
               }
            ],
            "transitionEvents": [
               {
                  "actions": [
```

```
{
   "clearTimer": {
      "timerName": "string"
   },
   "dynamoDB": {
      "hashKeyField": "string",
      "hashKeyType": "string",
      "hashKeyValue": "string",
      "operation": "string",
      "payload": {
         "contentExpression": "string",
         "type": "string"
      },
      "payloadField": "string",
      "rangeKeyField": "string",
      "rangeKeyType": "string",
      "rangeKeyValue": "string",
      "tableName": "string"
   },
   "dynamoDBv2": {
      "payload": {
         "contentExpression": "string",
         "type": "string"
      },
      "tableName": "string"
   },
   "firehose": {
      "deliveryStreamName": "string",
      "payload": {
         "contentExpression": "string",
         "type": "string"
      },
      "separator": "string"
   },
   "iotEvents": {
      "inputName": "string",
      "payload": {
         "contentExpression": "string",
         "type": "string"
      }
   },
   "iotSiteWise": {
      "assetId": "string",
      "entryId": "string",
```

```
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "lambda": {
            "functionArn": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "resetTimer": {
            "timerName": "string"
         },
         "setTimer": {
            "durationExpression": "string",
            "seconds": number,
            "timerName": "string"
         },
         "setVariable": {
            "value": "string",
            "variableName": "string"
         },
         "sns": {
            "payload": {
```

```
                                    "contentExpression": "string",
                                    "type": "string"
                                 },
                                 "targetArn": "string"
                              },
                              "sqs": {
                                 "payload": {
                                    "contentExpression": "string",
                                    "type": "string"
                                 },
                                 "queueUrl": "string",
                                 "useBase64": boolean
                              }
                           }
                        ],
                        "condition": "string",
                        "eventName": "string",
                        "nextState": "string"
                     }
                  ]
               },
               "stateName": "string"
            }
         ]
      }
   }
}
```

Response Elements

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

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

detectorModel

Information about the detector model.

Type: DetectorModel 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 PHP V3

- AWS SDK for Python
- AWS SDK for Ruby V3

DescribeDetectorModelAnalysis

Service: AWS IoT Events

Retrieves runtime information about a detector model analysis.

> **Note**
>
> After AWS IoT Events starts analyzing your detector model, you have up to 24 hours to retrieve the analysis results.

Request Syntax

```
GET /analysis/detector-models/analysisId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

analysisId

The ID of the analysis result that you want to retrieve.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "status": "string"
}
```

Response Elements

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

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

status

The status of the analysis activity. The status can be one of the following values:

- `RUNNING` - AWS IoT Events is analyzing your detector model. This process can take several minutes to complete.
- `COMPLETE` - AWS IoT Events finished analyzing your detector model.
- `FAILED` - AWS IoT Events couldn't analyze your detector model. Try again later.

Type: String

Valid Values: `RUNNING | COMPLETE | FAILED`

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DescribeInput

Service: AWS IoT Events

Describes an input.

Request Syntax

```
GET /inputs/inputName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

inputName

The name of the input.

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

Pattern: ^[a-zA-Z][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

{
   "input": {
      "inputConfiguration": {
         "creationTime": number,
         "inputArn": "string",
         "inputDescription": "string",
         "inputName": "string",
         "lastUpdateTime": number,
         "status": "string"
```

```
      },
      "inputDefinition": {
         "attributes": [
            {
               "jsonPath": "string"
            }
         ]
      }
   }
}
```

Response Elements

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

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

input

Information about the input.

Type: Input 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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DescribeLoggingOptions

Service: AWS IoT Events

Retrieves the current settings of the AWS IoT Events logging options.

Request Syntax

```
GET /logging 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

{
   "loggingOptions": {
      "detectorDebugOptions": [
         {
            "detectorModelName": "string",
            "keyValue": "string"
         }
      ],
      "enabled": boolean,
      "level": "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.

loggingOptions

The current settings of the AWS IoT Events logging options.

Type: LoggingOptions 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

UnsupportedOperationException

The requested operation is not supported.

HTTP Status Code: 501

See Also

For more information about using this API in one of 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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetDetectorModelAnalysisResults

Service: AWS IoT Events

Retrieves one or more analysis results of the detector model.

> **Note**
>
> After AWS IoT Events starts analyzing your detector model, you have up to 24 hours to retrieve the analysis results.

Request Syntax

```
GET /analysis/detector-models/analysisId/results?
maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

analysisId

The ID of the analysis result that you want to retrieve.

Required: Yes

maxResults

The maximum number of results to be returned per request.

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
```

```
{
   "analysisResults": [
      {
         "level": "string",
         "locations": [
            {
               "path": "string"
            }
         ],
         "message": "string",
         "type": "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.

analysisResults

Contains information about one or more analysis results.

Type: Array of AnalysisResult 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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListAlarmModels

Service: AWS IoT Events

Lists the alarm models that you created. The operation returns only the metadata associated with each alarm model.

Request Syntax

```
GET /alarm-models?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

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

{
   "alarmModelSummaries": [
      {
         "alarmModelDescription": "string",
         "alarmModelName": "string",
         "creationTime": 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.

alarmModelSummaries

A list that summarizes each alarm model.

Type: Array of AlarmModelSummary 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

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListAlarmModelVersions

Service: AWS IoT Events

Lists all the versions of an alarm model. The operation returns only the metadata associated with each alarm model version.

Request Syntax

```
GET /alarm-models/alarmModelName/versions?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
```

```
{
   "alarmModelVersionSummaries": [
      {
         "alarmModelArn": "string",
         "alarmModelName": "string",
         "alarmModelVersion": "string",
         "creationTime": number,
         "lastUpdateTime": number,
         "roleArn": "string",
         "status": "string",
         "statusMessage": "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.

alarmModelVersionSummaries

A list that summarizes each alarm model version.

Type: Array of AlarmModelVersionSummary 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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListDetectorModels

Service: AWS IoT Events

Lists the detector models you have created. Only the metadata associated with each detector model is returned.

Request Syntax

```
GET /detector-models?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

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

{
   "detectorModelSummaries": [
      {
         "creationTime": number,
         "detectorModelDescription": "string",
         "detectorModelName": "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.

detectorModelSummaries

Summary information about the detector models.

Type: Array of DetectorModelSummary 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

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListDetectorModelVersions

Service: AWS IoT Events

Lists all the versions of a detector model. Only the metadata associated with each detector model version is returned.

Request Syntax

```
GET /detector-models/detectorModelName/versions?
maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

detectorModelName

The name of the detector model whose versions are returned.

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
```

```
{
   "detectorModelVersionSummaries": [
      {
         "creationTime": number,
         "detectorModelArn": "string",
         "detectorModelName": "string",
         "detectorModelVersion": "string",
         "evaluationMethod": "string",
         "lastUpdateTime": number,
         "roleArn": "string",
         "status": "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.

detectorModelVersionSummaries

Summary information about the detector model versions.

Type: Array of DetectorModelVersionSummary 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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListInputRoutings

Service: AWS IoT Events

Lists one or more input routings.

Request Syntax

```
POST /input-routings HTTP/1.1
Content-type: application/json

{
   "inputIdentifier": {
      "iotEventsInputIdentifier": {
         "inputName": "string"
      },
      "iotSiteWiseInputIdentifier": {
         "iotSiteWiseAssetModelPropertyIdentifier": {
            "assetModelId": "string",
            "propertyId": "string"
         }
      }
   },
   "maxResults": number,
   "nextToken": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

inputIdentifier

The identifier of the routed input.

Type: InputIdentifier object

Required: Yes

maxResults

The maximum number of results to be returned per request.

Type: Integer

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

Required: No

nextToken

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

Type: String

Required: No

Response Syntax

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

{
   "nextToken": "string",
   "routedResources": [
      {
         "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

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

Type: String

routedResources

Summary information about the routed resources.

Type: Array of RoutedResource 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

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListInputs

Service: AWS IoT Events

Lists the inputs you have created.

Request Syntax

```
GET /inputs?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

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

{
   "inputSummaries": [
      {
         "creationTime": number,
         "inputArn": "string",
         "inputDescription": "string",
         "inputName": "string",
         "lastUpdateTime": number,
         "status": "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.

inputSummaries

Summary information about the inputs.

Type: Array of InputSummary 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

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListTagsForResource

Service: AWS IoT Events

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

Request Syntax

```
GET /tags?resourceArn=resourceArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The ARN of the resource.

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
Content-type: application/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

The list of tags assigned to the resource.

Type: Array of Tag 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

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The resource was not found.

HTTP Status Code: 404

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

PutLoggingOptions

Service: AWS IoT Events

Sets or updates the AWS IoT Events logging options.

If you update the value of any `loggingOptions` field, it takes up to one minute for the change to take effect. If you change the policy attached to the role you specified in the `roleArn` field (for example, to correct an invalid policy), it takes up to five minutes for that change to take effect.

Request Syntax

```
PUT /logging HTTP/1.1
Content-type: application/json

{
   "loggingOptions": {
      "detectorDebugOptions": [
         {
            "detectorModelName": "string",
            "keyValue": "string"
         }
      ],
      "enabled": boolean,
      "level": "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.

loggingOptions

The new values of the AWS IoT Events logging options.

Type: LoggingOptions 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

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

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

ServiceUnavailableException

The service is currently unavailable.

HTTP Status Code: 503

ThrottlingException

The request could not be completed due to throttling.

HTTP Status Code: 429

UnsupportedOperationException

The requested operation is not supported.

HTTP Status Code: 501

See Also

For more information about using this API in one of 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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

StartDetectorModelAnalysis

Service: AWS IoT Events

Analyzes your detector model. For more information, see Troubleshooting a detector model in the *AWS IoT Events Developer Guide*.

Request Syntax

```
POST /analysis/detector-models/ HTTP/1.1
Content-type: application/json

{
   "detectorModelDefinition": {
      "initialStateName": "string",
      "states": [
         {
            "onEnter": {
               "events": [
                  {
                     "actions": [
                        {
                           "clearTimer": {
                              "timerName": "string"
                           },
                           "dynamoDB": {
                              "hashKeyField": "string",
                              "hashKeyType": "string",
                              "hashKeyValue": "string",
                              "operation": "string",
                              "payload": {
                                 "contentExpression": "string",
                                 "type": "string"
                              },
                              "payloadField": "string",
                              "rangeKeyField": "string",
                              "rangeKeyType": "string",
                              "rangeKeyValue": "string",
                              "tableName": "string"
                           },
                           "dynamoDBv2": {
                              "payload": {
                                 "contentExpression": "string",
                                 "type": "string"
```

```
            },
            "tableName": "string"
         },
         "firehose": {
            "deliveryStreamName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "separator": "string"
         },
         "iotEvents": {
            "inputName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "iotSiteWise": {
            "assetId": "string",
            "entryId": "string",
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
```

```
                        "lambda": {
                           "functionArn": "string",
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           }
                        },
                        "resetTimer": {
                           "timerName": "string"
                        },
                        "setTimer": {
                           "durationExpression": "string",
                           "seconds": number,
                           "timerName": "string"
                        },
                        "setVariable": {
                           "value": "string",
                           "variableName": "string"
                        },
                        "sns": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "targetArn": "string"
                        },
                        "sqs": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "queueUrl": "string",
                           "useBase64": boolean
                        }
                     }
                  ],
                  "condition": "string",
                  "eventName": "string"
               }
            ]
         },
         "onExit": {
            "events": [
               {
```

```
"actions": [
   {
      "clearTimer": {
         "timerName": "string"
      },
      "dynamoDB": {
         "hashKeyField": "string",
         "hashKeyType": "string",
         "hashKeyValue": "string",
         "operation": "string",
         "payload": {
            "contentExpression": "string",
            "type": "string"
         },
         "payloadField": "string",
         "rangeKeyField": "string",
         "rangeKeyType": "string",
         "rangeKeyValue": "string",
         "tableName": "string"
      },
      "dynamoDBv2": {
         "payload": {
            "contentExpression": "string",
            "type": "string"
         },
         "tableName": "string"
      },
      "firehose": {
         "deliveryStreamName": "string",
         "payload": {
            "contentExpression": "string",
            "type": "string"
         },
         "separator": "string"
      },
      "iotEvents": {
         "inputName": "string",
         "payload": {
            "contentExpression": "string",
            "type": "string"
         }
      },
      "iotSiteWise": {
         "assetId": "string",
```

```
            "entryId": "string",
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "lambda": {
            "functionArn": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "resetTimer": {
            "timerName": "string"
         },
         "setTimer": {
            "durationExpression": "string",
            "seconds": number,
            "timerName": "string"
         },
         "setVariable": {
            "value": "string",
            "variableName": "string"
         },
         "sns": {
```

```
                        "payload": {
                           "contentExpression": "string",
                           "type": "string"
                        },
                        "targetArn": "string"
                     },
                     "sqs": {
                        "payload": {
                           "contentExpression": "string",
                           "type": "string"
                        },
                        "queueUrl": "string",
                        "useBase64": boolean
                     }
                  }
               ],
               "condition": "string",
               "eventName": "string"
            }
         ]
      },
      "onInput": {
         "events": [
            {
               "actions": [
                  {
                     "clearTimer": {
                        "timerName": "string"
                     },
                     "dynamoDB": {
                        "hashKeyField": "string",
                        "hashKeyType": "string",
                        "hashKeyValue": "string",
                        "operation": "string",
                        "payload": {
                           "contentExpression": "string",
                           "type": "string"
                        },
                        "payloadField": "string",
                        "rangeKeyField": "string",
                        "rangeKeyType": "string",
                        "rangeKeyValue": "string",
                        "tableName": "string"
                     },
```

```
            "dynamoDBv2": {
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "tableName": "string"
            },
            "firehose": {
               "deliveryStreamName": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "separator": "string"
            },
            "iotEvents": {
               "inputName": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
            },
            "iotSiteWise": {
               "assetId": "string",
               "entryId": "string",
               "propertyAlias": "string",
               "propertyId": "string",
               "propertyValue": {
                  "quality": "string",
                  "timestamp": {
                     "offsetInNanos": "string",
                     "timeInSeconds": "string"
                  },
                  "value": {
                     "booleanValue": "string",
                     "doubleValue": "string",
                     "integerValue": "string",
                     "stringValue": "string"
                  }
               }
            },
            "iotTopicPublish": {
               "mqttTopic": "string",
               "payload": {
```

```
                        "contentExpression": "string",
                        "type": "string"
                     }
                  },
                  "lambda": {
                     "functionArn": "string",
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     }
                  },
                  "resetTimer": {
                     "timerName": "string"
                  },
                  "setTimer": {
                     "durationExpression": "string",
                     "seconds": number,
                     "timerName": "string"
                  },
                  "setVariable": {
                     "value": "string",
                     "variableName": "string"
                  },
                  "sns": {
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     },
                     "targetArn": "string"
                  },
                  "sqs": {
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     },
                     "queueUrl": "string",
                     "useBase64": boolean
                  }
               }
            ],
            "condition": "string",
            "eventName": "string"
         }
      ],
```

```
            "transitionEvents": [
               {
                  "actions": [
                     {
                        "clearTimer": {
                           "timerName": "string"
                        },
                        "dynamoDB": {
                           "hashKeyField": "string",
                           "hashKeyType": "string",
                           "hashKeyValue": "string",
                           "operation": "string",
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "payloadField": "string",
                           "rangeKeyField": "string",
                           "rangeKeyType": "string",
                           "rangeKeyValue": "string",
                           "tableName": "string"
                        },
                        "dynamoDBv2": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "tableName": "string"
                        },
                        "firehose": {
                           "deliveryStreamName": "string",
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "separator": "string"
                        },
                        "iotEvents": {
                           "inputName": "string",
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           }
                        },
```

```
            "iotSiteWise": {
               "assetId": "string",
               "entryId": "string",
               "propertyAlias": "string",
               "propertyId": "string",
               "propertyValue": {
                  "quality": "string",
                  "timestamp": {
                     "offsetInNanos": "string",
                     "timeInSeconds": "string"
                  },
                  "value": {
                     "booleanValue": "string",
                     "doubleValue": "string",
                     "integerValue": "string",
                     "stringValue": "string"
                  }
               }
            },
            "iotTopicPublish": {
               "mqttTopic": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
            },
            "lambda": {
               "functionArn": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
            },
            "resetTimer": {
               "timerName": "string"
            },
            "setTimer": {
               "durationExpression": "string",
               "seconds": number,
               "timerName": "string"
            },
            "setVariable": {
               "value": "string",
               "variableName": "string"
```

```
                        },
                        "sns": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "targetArn": "string"
                        },
                        "sqs": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "queueUrl": "string",
                           "useBase64": boolean
                        }
                     }
                  ],
                  "condition": "string",
                  "eventName": "string",
                  "nextState": "string"
               }
            ]
         },
         "stateName": "string"
      }
   ]
}
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

detectorModelDefinition

Information that defines how a detector operates.

Type: DetectorModelDefinition object

Required: Yes

Response Syntax

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

{
   "analysisId": "string"
}
```

Response Elements

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

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

analysisId

The ID that you use to retrieve the analysis result.

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

LimitExceededException

A limit was exceeded.

HTTP Status Code: 410

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

TagResource

Service: AWS IoT Events

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

Request Syntax

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

{
   "tags": [
      {
         "key": "string",
         "value": "string"
      }
   ]
}
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The ARN of the resource.

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

tags

The new or modified tags for the resource.

Type: Array of Tag 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

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

LimitExceededException

A limit was exceeded.

HTTP Status Code: 410

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The resource was not found.

HTTP Status Code: 404

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UntagResource

Service: AWS IoT Events

Removes the given tags (metadata) from the resource.

Request Syntax

```
DELETE /tags?resourceArn=resourceArn&tagKeys=tagKeys HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The ARN of the resource.

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

Required: Yes

tagKeys

A list of the keys of the tags to be removed from the resource.

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

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

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

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

ResourceNotFoundException

The resource was not found.

HTTP Status Code: 404

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UpdateAlarmModel

Service: AWS IoT Events

Updates an alarm model. Any alarms that were created based on the previous version are deleted and then created again as new data arrives.

Request Syntax

```
POST /alarm-models/alarmModelName HTTP/1.1
Content-type: application/json

{
   "alarmCapabilities": {
      "acknowledgeFlow": {
         "enabled": boolean
      },
      "initializationConfiguration": {
         "disabledOnInitialization": boolean
      }
   },
   "alarmEventActions": {
      "alarmActions": [
         {
            "dynamoDB": {
               "hashKeyField": "string",
               "hashKeyType": "string",
               "hashKeyValue": "string",
               "operation": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "payloadField": "string",
               "rangeKeyField": "string",
               "rangeKeyType": "string",
               "rangeKeyValue": "string",
               "tableName": "string"
            },
            "dynamoDBv2": {
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
```

```
            "tableName": "string"
         },
         "firehose": {
            "deliveryStreamName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "separator": "string"
         },
         "iotEvents": {
            "inputName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "iotSiteWise": {
            "assetId": "string",
            "entryId": "string",
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "lambda": {
```

```
            "functionArn": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "sns": {
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "targetArn": "string"
         },
         "sqs": {
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "queueUrl": "string",
            "useBase64": boolean
         }
      }
   ]
},
"alarmModelDescription": "string",
"alarmNotification": {
   "notificationActions": [
      {
         "action": {
            "lambdaAction": {
               "functionArn": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
            }
         },
         "emailConfigurations": [
            {
               "content": {
                  "additionalMessage": "string",
                  "subject": "string"
               },
               "from": "string",
```

```
                "recipients": {
                   "to": [
                      {
                         "ssoIdentity": {
                            "identityStoreId": "string",
                            "userId": "string"
                         }
                      }
                   ]
                }
             }
          ],
          "smsConfigurations": [
             {
                "additionalMessage": "string",
                "recipients": [
                   {
                      "ssoIdentity": {
                         "identityStoreId": "string",
                         "userId": "string"
                      }
                   }
                ],
                "senderId": "string"
             }
          ]
       }
    ]
 },
 "alarmRule": {
    "simpleRule": {
       "comparisonOperator": "string",
       "inputProperty": "string",
       "threshold": "string"
    }
 },
 "roleArn": "string",
 "severity": number
}
```

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

Request Body

The request accepts the following data in JSON format.

alarmCapabilities

Contains the configuration information of alarm state changes.

Type: AlarmCapabilities object

Required: No

alarmEventActions

Contains information about one or more alarm actions.

Type: AlarmEventActions object

Required: No

alarmModelDescription

The description of the alarm model.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

alarmNotification

Contains information about one or more notification actions.

Type: AlarmNotification object

Required: No

alarmRule

Defines when your alarm is invoked.

Type: AlarmRule object

Required: Yes

roleArn

The ARN of the IAM role that allows the alarm to perform actions and access AWS resources. For more information, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Type: String

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

Required: Yes

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

Response Syntax

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

{
   "alarmModelArn": "string",
   "alarmModelVersion": "string",
   "creationTime": number,
   "lastUpdateTime": number,
   "status": "string"
```

```
}
```

Response Elements

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

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

alarmModelArn

The ARN of the alarm model. For more information, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Type: String

alarmModelVersion

The version of the alarm model.

Type: String

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

creationTime

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

Type: Timestamp

lastUpdateTime

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

Type: Timestamp

status

The status of the alarm model. The status can be one of the following values:

- `ACTIVE` - The alarm model is active and it's ready to evaluate data.
- `ACTIVATING` - AWS IoT Events is activating your alarm model. Activating an alarm model can take up to a few minutes.
- `INACTIVE` - The alarm model is inactive, so it isn't ready to evaluate data. Check your alarm model information and update the alarm model.

- `FAILED` - You couldn't create or update the alarm model. Check your alarm model information and try again.

Type: String

Valid Values: `ACTIVE | ACTIVATING | INACTIVE | FAILED`

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

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UpdateDetectorModel

Service: AWS IoT Events

Updates a detector model. Detectors (instances) spawned by the previous version are deleted and then re-created as new inputs arrive.

Request Syntax

```
POST /detector-models/detectorModelName HTTP/1.1
Content-type: application/json

{
   "detectorModelDefinition": {
      "initialStateName": "string",
      "states": [
         {
            "onEnter": {
               "events": [
                  {
                     "actions": [
                        {
                           "clearTimer": {
                              "timerName": "string"
                           },
                           "dynamoDB": {
                              "hashKeyField": "string",
                              "hashKeyType": "string",
                              "hashKeyValue": "string",
                              "operation": "string",
                              "payload": {
                                 "contentExpression": "string",
                                 "type": "string"
                              },
                              "payloadField": "string",
                              "rangeKeyField": "string",
                              "rangeKeyType": "string",
                              "rangeKeyValue": "string",
                              "tableName": "string"
                           },
                           "dynamoDBv2": {
                              "payload": {
                                 "contentExpression": "string",
                                 "type": "string"
```

```
            },
            "tableName": "string"
         },
         "firehose": {
            "deliveryStreamName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            },
            "separator": "string"
         },
         "iotEvents": {
            "inputName": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "iotSiteWise": {
            "assetId": "string",
            "entryId": "string",
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
```

```
                        "lambda": {
                           "functionArn": "string",
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           }
                        },
                        "resetTimer": {
                           "timerName": "string"
                        },
                        "setTimer": {
                           "durationExpression": "string",
                           "seconds": number,
                           "timerName": "string"
                        },
                        "setVariable": {
                           "value": "string",
                           "variableName": "string"
                        },
                        "sns": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "targetArn": "string"
                        },
                        "sqs": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "queueUrl": "string",
                           "useBase64": boolean
                        }
                     }
                  ],
                  "condition": "string",
                  "eventName": "string"
               }
            ]
         },
         "onExit": {
            "events": [
               {
```

```
"actions": [
   {
      "clearTimer": {
         "timerName": "string"
      },
      "dynamoDB": {
         "hashKeyField": "string",
         "hashKeyType": "string",
         "hashKeyValue": "string",
         "operation": "string",
         "payload": {
            "contentExpression": "string",
            "type": "string"
         },
         "payloadField": "string",
         "rangeKeyField": "string",
         "rangeKeyType": "string",
         "rangeKeyValue": "string",
         "tableName": "string"
      },
      "dynamoDBv2": {
         "payload": {
            "contentExpression": "string",
            "type": "string"
         },
         "tableName": "string"
      },
      "firehose": {
         "deliveryStreamName": "string",
         "payload": {
            "contentExpression": "string",
            "type": "string"
         },
         "separator": "string"
      },
      "iotEvents": {
         "inputName": "string",
         "payload": {
            "contentExpression": "string",
            "type": "string"
         }
      },
      "iotSiteWise": {
         "assetId": "string",
```

```
            "entryId": "string",
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValue": {
               "quality": "string",
               "timestamp": {
                  "offsetInNanos": "string",
                  "timeInSeconds": "string"
               },
               "value": {
                  "booleanValue": "string",
                  "doubleValue": "string",
                  "integerValue": "string",
                  "stringValue": "string"
               }
            }
         },
         "iotTopicPublish": {
            "mqttTopic": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "lambda": {
            "functionArn": "string",
            "payload": {
               "contentExpression": "string",
               "type": "string"
            }
         },
         "resetTimer": {
            "timerName": "string"
         },
         "setTimer": {
            "durationExpression": "string",
            "seconds": number,
            "timerName": "string"
         },
         "setVariable": {
            "value": "string",
            "variableName": "string"
         },
         "sns": {
```

```
                        "payload": {
                           "contentExpression": "string",
                           "type": "string"
                        },
                        "targetArn": "string"
                     },
                     "sqs": {
                        "payload": {
                           "contentExpression": "string",
                           "type": "string"
                        },
                        "queueUrl": "string",
                        "useBase64": boolean
                     }
                  }
               ],
               "condition": "string",
               "eventName": "string"
            }
         ]
      },
      "onInput": {
         "events": [
            {
               "actions": [
                  {
                     "clearTimer": {
                        "timerName": "string"
                     },
                     "dynamoDB": {
                        "hashKeyField": "string",
                        "hashKeyType": "string",
                        "hashKeyValue": "string",
                        "operation": "string",
                        "payload": {
                           "contentExpression": "string",
                           "type": "string"
                        },
                        "payloadField": "string",
                        "rangeKeyField": "string",
                        "rangeKeyType": "string",
                        "rangeKeyValue": "string",
                        "tableName": "string"
                     },
```

```
            "dynamoDBv2": {
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "tableName": "string"
            },
            "firehose": {
               "deliveryStreamName": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               },
               "separator": "string"
            },
            "iotEvents": {
               "inputName": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
            },
            "iotSiteWise": {
               "assetId": "string",
               "entryId": "string",
               "propertyAlias": "string",
               "propertyId": "string",
               "propertyValue": {
                  "quality": "string",
                  "timestamp": {
                     "offsetInNanos": "string",
                     "timeInSeconds": "string"
                  },
                  "value": {
                     "booleanValue": "string",
                     "doubleValue": "string",
                     "integerValue": "string",
                     "stringValue": "string"
                  }
               }
            },
            "iotTopicPublish": {
               "mqttTopic": "string",
               "payload": {
```

```
                        "contentExpression": "string",
                        "type": "string"
                     }
                  },
                  "lambda": {
                     "functionArn": "string",
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     }
                  },
                  "resetTimer": {
                     "timerName": "string"
                  },
                  "setTimer": {
                     "durationExpression": "string",
                     "seconds": number,
                     "timerName": "string"
                  },
                  "setVariable": {
                     "value": "string",
                     "variableName": "string"
                  },
                  "sns": {
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     },
                     "targetArn": "string"
                  },
                  "sqs": {
                     "payload": {
                        "contentExpression": "string",
                        "type": "string"
                     },
                     "queueUrl": "string",
                     "useBase64": boolean
                  }
               }
            ],
            "condition": "string",
            "eventName": "string"
         }
      ],
```

```
            "transitionEvents": [
               {
                  "actions": [
                     {
                        "clearTimer": {
                           "timerName": "string"
                        },
                        "dynamoDB": {
                           "hashKeyField": "string",
                           "hashKeyType": "string",
                           "hashKeyValue": "string",
                           "operation": "string",
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "payloadField": "string",
                           "rangeKeyField": "string",
                           "rangeKeyType": "string",
                           "rangeKeyValue": "string",
                           "tableName": "string"
                        },
                        "dynamoDBv2": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "tableName": "string"
                        },
                        "firehose": {
                           "deliveryStreamName": "string",
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "separator": "string"
                        },
                        "iotEvents": {
                           "inputName": "string",
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           }
                        },
```

```
            "iotSiteWise": {
               "assetId": "string",
               "entryId": "string",
               "propertyAlias": "string",
               "propertyId": "string",
               "propertyValue": {
                  "quality": "string",
                  "timestamp": {
                     "offsetInNanos": "string",
                     "timeInSeconds": "string"
                  },
                  "value": {
                     "booleanValue": "string",
                     "doubleValue": "string",
                     "integerValue": "string",
                     "stringValue": "string"
                  }
               }
            },
            "iotTopicPublish": {
               "mqttTopic": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
            },
            "lambda": {
               "functionArn": "string",
               "payload": {
                  "contentExpression": "string",
                  "type": "string"
               }
            },
            "resetTimer": {
               "timerName": "string"
            },
            "setTimer": {
               "durationExpression": "string",
               "seconds": number,
               "timerName": "string"
            },
            "setVariable": {
               "value": "string",
               "variableName": "string"
```

```
                        },
                        "sns": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "targetArn": "string"
                        },
                        "sqs": {
                           "payload": {
                              "contentExpression": "string",
                              "type": "string"
                           },
                           "queueUrl": "string",
                           "useBase64": boolean
                        }
                     }
                  ],
                  "condition": "string",
                  "eventName": "string",
                  "nextState": "string"
               }
            ]
         },
         "stateName": "string"
      }
   ]
  },
  "detectorModelDescription": "string",
  "evaluationMethod": "string",
  "roleArn": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

detectorModelName

The name of the detector model that is updated.

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

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

detectorModelDefinition

Information that defines how a detector operates.

Type: DetectorModelDefinition object

Required: Yes

detectorModelDescription

A brief description of the detector model.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

evaluationMethod

Information about the order in which events are evaluated and how actions are executed.

Type: String

Valid Values: `BATCH | SERIAL`

Required: No

roleArn

The ARN of the role that grants permission to AWS IoT Events to perform its operations.

Type: String

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

Required: Yes

Response Syntax

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

{
   "detectorModelConfiguration": {
      "creationTime": number,
      "detectorModelArn": "string",
      "detectorModelDescription": "string",
      "detectorModelName": "string",
      "detectorModelVersion": "string",
      "evaluationMethod": "string",
      "key": "string",
      "lastUpdateTime": number,
      "roleArn": "string",
      "status": "string"
   }
}
```

Response Elements

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

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

detectorModelConfiguration

Information about how the detector model is configured.

Type: DetectorModelConfiguration 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

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

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 PHP V3

- AWS SDK for Python
- AWS SDK for Ruby V3

UpdateInput

Service: AWS IoT Events

Updates an input.

Request Syntax

```
PUT /inputs/inputName HTTP/1.1
Content-type: application/json

{
   "inputDefinition": {
      "attributes": [
         {
            "jsonPath": "string"
         }
      ]
   },
   "inputDescription": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

inputName

The name of the input you want to update.

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

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

inputDefinition

The definition of the input.

Type: InputDefinition object

Required: Yes

inputDescription

A brief description of the input.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

Response Syntax

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

{
   "inputConfiguration": {
      "creationTime": number,
      "inputArn": "string",
      "inputDescription": "string",
      "inputName": "string",
      "lastUpdateTime": number,
      "status": "string"
   }
}
```

Response Elements

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

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

inputConfiguration

Information about the configuration of the input.

Type: InputConfiguration 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

ResourceInUseException

The resource is in use.

HTTP Status Code: 409

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

AWS IoT Events Data

The following actions are supported by AWS IoT Events Data:

- BatchAcknowledgeAlarm
- BatchDeleteDetector
- BatchDisableAlarm
- BatchEnableAlarm
- BatchPutMessage
- BatchResetAlarm
- BatchSnoozeAlarm
- BatchUpdateDetector
- DescribeAlarm
- DescribeDetector
- ListAlarms
- ListDetectors

BatchAcknowledgeAlarm

Service: AWS IoT Events Data

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

{
   "acknowledgeActionRequests": [
      {
         "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.

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

{
   "errorEntries": [
      {
         "errorCode": "string",
         "errorMessage": "string",
         "requestId": "string"
      }
   ]
}
```

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

BatchDeleteDetector

Service: AWS IoT Events Data

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

{
   "detectors": [
      {
         "detectorModelName": "string",
         "keyValue": "string",
         "messageId": "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 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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

BatchDisableAlarm

Service: AWS IoT Events Data

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

{
   "disableActionRequests": [
      {
         "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.

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

{
   "errorEntries": [
      {
         "errorCode": "string",
         "errorMessage": "string",
         "requestId": "string"
      }
   ]
}
```

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

BatchEnableAlarm

Service: AWS IoT Events Data

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

{
   "errorEntries": [
      {
         "errorCode": "string",
         "errorMessage": "string",
         "requestId": "string"
      }
   ]
}
```

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

BatchPutMessage

Service: AWS IoT Events Data

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": [
      {
         "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.

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

BatchResetAlarm

Service: AWS IoT Events Data

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

{
   "resetActionRequests": [
      {
         "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.

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

{
   "errorEntries": [
      {
         "errorCode": "string",
         "errorMessage": "string",
         "requestId": "string"
      }
   ]
}
```

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

BatchSnoozeAlarm

Service: AWS IoT Events Data

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": [
      {
         "errorCode": "string",
         "errorMessage": "string",
         "requestId": "string"
      }
   ]
}
```

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

BatchUpdateDetector

Service: AWS IoT Events Data

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DescribeAlarm

Service: AWS IoT Events Data

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DescribeDetector

Service: AWS IoT Events Data

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListAlarms

Service: AWS IoT Events Data

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 PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListDetectors

Service: AWS IoT Events Data

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

{
   "detectorSummaries": [
      {
         "creationTime": number,
         "detectorModelName": "string",
         "detectorModelVersion": "string",
         "keyValue": "string",
         "lastUpdateTime": number,
         "state": {
            "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.

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 PHP V3

- AWS SDK for Python
- AWS SDK for Ruby V3

Data Types

The following data types are supported by AWS IoT Events:

- AcknowledgeFlow
- Action
- AlarmAction
- AlarmCapabilities
- AlarmEventActions
- AlarmModelSummary
- AlarmModelVersionSummary
- AlarmNotification
- AlarmRule
- AnalysisResult
- AnalysisResultLocation
- AssetPropertyTimestamp
- AssetPropertyValue
- AssetPropertyVariant
- Attribute
- ClearTimerAction
- DetectorDebugOption
- DetectorModel
- DetectorModelConfiguration
- DetectorModelDefinition
- DetectorModelSummary
- DetectorModelVersionSummary
- DynamoDBAction
- DynamoDBv2Action
- EmailConfiguration
- EmailContent
- EmailRecipients

- Event
- FirehoseAction
- InitializationConfiguration
- Input
- InputConfiguration
- InputDefinition
- InputIdentifier
- InputSummary
- IotEventsAction
- IotEventsInputIdentifier
- IotSiteWiseAction
- IotSiteWiseAssetModelPropertyIdentifier
- IotSiteWiseInputIdentifier
- IotTopicPublishAction
- LambdaAction
- LoggingOptions
- NotificationAction
- NotificationTargetActions
- OnEnterLifecycle
- OnExitLifecycle
- OnInputLifecycle
- Payload
- RecipientDetail
- ResetTimerAction
- RoutedResource
- SetTimerAction
- SetVariableAction
- SimpleRule
- SMSConfiguration
- SNSTopicPublishAction

- SqsAction
- SSOIdentity
- State
- Tag
- TransitionEvent

The following data types are supported by AWS IoT Events Data:

- 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

AWS IoT Events

The following data types are supported by AWS IoT Events:

- AcknowledgeFlow
- Action
- AlarmAction
- AlarmCapabilities
- AlarmEventActions
- AlarmModelSummary
- AlarmModelVersionSummary
- AlarmNotification
- AlarmRule
- AnalysisResult
- AnalysisResultLocation
- AssetPropertyTimestamp
- AssetPropertyValue
- AssetPropertyVariant

- Attribute
- ClearTimerAction
- DetectorDebugOption
- DetectorModel
- DetectorModelConfiguration
- DetectorModelDefinition
- DetectorModelSummary
- DetectorModelVersionSummary
- DynamoDBAction
- DynamoDBv2Action
- EmailConfiguration
- EmailContent
- EmailRecipients
- Event
- FirehoseAction
- InitializationConfiguration
- Input
- InputConfiguration
- InputDefinition
- InputIdentifier
- InputSummary
- IotEventsAction
- IotEventsInputIdentifier
- IotSiteWiseAction
- IotSiteWiseAssetModelPropertyIdentifier
- IotSiteWiseInputIdentifier
- IotTopicPublishAction
- LambdaAction
- LoggingOptions
- NotificationAction

- NotificationTargetActions
- OnEnterLifecycle
- OnExitLifecycle
- OnInputLifecycle
- Payload
- RecipientDetail
- ResetTimerAction
- RoutedResource
- SetTimerAction
- SetVariableAction
- SimpleRule
- SMSConfiguration
- SNSTopicPublishAction
- SqsAction
- SSOIdentity
- State
- Tag
- TransitionEvent

AcknowledgeFlow

Service: AWS IoT Events

Specifies whether to get notified for alarm state changes.

Contents

enabled

The value must be TRUE or FALSE. If TRUE, you receive a notification when the alarm state changes. You must choose to acknowledge the notification before the alarm state can return to NORMAL. If FALSE, you won't receive notifications. The alarm automatically changes to the NORMAL state when the input property value returns to the specified range.

Type: Boolean

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

Action

Service: AWS IoT Events

An action to be performed when the `condition` is TRUE.

Contents

clearTimer

Information needed to clear the timer.

Type: ClearTimerAction object

Required: No

dynamoDB

Writes to the DynamoDB table that you created. The default action payload contains all attribute-value pairs that have the information about the detector model instance and the event that triggered the action. You can customize the payload. One column of the DynamoDB table receives all attribute-value pairs in the payload that you specify. For more information, see Actions in *AWS IoT Events Developer Guide*.

Type: DynamoDBAction object

Required: No

dynamoDBv2

Writes to the DynamoDB table that you created. The default action payload contains all attribute-value pairs that have the information about the detector model instance and the event that triggered the action. You can customize the payload. A separate column of the DynamoDB table receives one attribute-value pair in the payload that you specify. For more information, see Actions in *AWS IoT Events Developer Guide*.

Type: DynamoDBv2Action object

Required: No

firehose

Sends information about the detector model instance and the event that triggered the action to an Amazon Kinesis Data Firehose delivery stream.

Type: FirehoseAction object

Required: No

iotEvents

Sends AWS IoT Events input, which passes information about the detector model instance and the event that triggered the action.

Type: IotEventsAction object

Required: No

iotSiteWise

Sends information about the detector model instance and the event that triggered the action to an asset property in AWS IoT SiteWise .

Type: IotSiteWiseAction object

Required: No

iotTopicPublish

Publishes an MQTT message with the given topic to the AWS IoT message broker.

Type: IotTopicPublishAction object

Required: No

lambda

Calls a Lambda function, passing in information about the detector model instance and the event that triggered the action.

Type: LambdaAction object

Required: No

resetTimer

Information needed to reset the timer.

Type: ResetTimerAction object

Required: No

setTimer

Information needed to set the timer.

Type: SetTimerAction object

Required: No

setVariable

Sets a variable to a specified value.

Type: SetVariableAction object

Required: No

sns

Sends an Amazon SNS message.

Type: SNSTopicPublishAction object

Required: No

sqs

Sends information about the detector model instance and the event that triggered the action to an Amazon SQS queue.

Type: SqsAction 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

AlarmAction

Service: AWS IoT Events

Specifies one of the following actions to receive notifications when the alarm state changes.

Contents

dynamoDB

Defines an action to write to the Amazon DynamoDB table that you created. The standard action payload contains all the information about the detector model instance and the event that triggered the action. You can customize the payload. One column of the DynamoDB table receives all attribute-value pairs in the payload that you specify.

You must use expressions for all parameters in `DynamoDBAction`. The expressions accept literals, operators, functions, references, and substitution templates.

Examples

- For literal values, the expressions must contain single quotes. For example, the value for the `hashKeyType` parameter can be `'STRING'`.
- For references, you must specify either variables or input values. For example, the value for the `hashKeyField` parameter can be `$input.GreenhouseInput.name`.
- For a substitution template, you must use `${}`, and the template must be in single quotes. A substitution template can also contain a combination of literals, operators, functions, references, and substitution templates.

  In the following example, the value for the `hashKeyValue` parameter uses a substitution template.

  ```
  '${$input.GreenhouseInput.temperature * 6 / 5 + 32} in Fahrenheit'
  ```

- For a string concatenation, you must use `+`. A string concatenation can also contain a combination of literals, operators, functions, references, and substitution templates.

  In the following example, the value for the `tableName` parameter uses a string concatenation.

  ```
  'GreenhouseTemperatureTable ' + $input.GreenhouseInput.date
  ```

For more information, see Expressions in the *AWS IoT Events Developer Guide*.

If the defined payload type is a string, `DynamoDBAction` writes non-JSON data to the DynamoDB table as binary data. The DynamoDB console displays the data as Base64-encoded text. The value for the `payloadField` parameter is `<payload-field>_raw`.

Type: DynamoDBAction object

Required: No

dynamoDBv2

Defines an action to write to the Amazon DynamoDB table that you created. The default action payload contains all the information about the detector model instance and the event that triggered the action. You can customize the payload. A separate column of the DynamoDB table receives one attribute-value pair in the payload that you specify.

You must use expressions for all parameters in `DynamoDBv2Action`. The expressions accept literals, operators, functions, references, and substitution templates.

Examples

- For literal values, the expressions must contain single quotes. For example, the value for the `tableName` parameter can be `'GreenhouseTemperatureTable'`.
- For references, you must specify either variables or input values. For example, the value for the `tableName` parameter can be `$variable.ddbtableName`.
- For a substitution template, you must use `${}`, and the template must be in single quotes. A substitution template can also contain a combination of literals, operators, functions, references, and substitution templates.

  In the following example, the value for the `contentExpression` parameter in `Payload` uses a substitution template.

  ```
  '{\"sensorID\": \"${$input.GreenhouseInput.sensor_id}\", \"temperature
  \": \"${$input.GreenhouseInput.temperature * 9 / 5 + 32}\"}'
  ```

- For a string concatenation, you must use `+`. A string concatenation can also contain a combination of literals, operators, functions, references, and substitution templates.

  In the following example, the value for the `tableName` parameter uses a string concatenation.

  ```
  'GreenhouseTemperatureTable ' + $input.GreenhouseInput.date
  ```

For more information, see Expressions in the *AWS IoT Events Developer Guide*.

The value for the `type` parameter in `Payload` must be `JSON`.

Type: DynamoDBv2Action object

Required: No

firehose

Sends information about the detector model instance and the event that triggered the action to an Amazon Kinesis Data Firehose delivery stream.

Type: FirehoseAction object

Required: No

iotEvents

Sends an AWS IoT Events input, passing in information about the detector model instance and the event that triggered the action.

Type: IotEventsAction object

Required: No

iotSiteWise

Sends information about the detector model instance and the event that triggered the action to a specified asset property in AWS IoT SiteWise.

You must use expressions for all parameters in `IotSiteWiseAction`. The expressions accept literals, operators, functions, references, and substitutions templates.

Examples

- For literal values, the expressions must contain single quotes. For example, the value for the `propertyAlias` parameter can be `'/company/windfarm/3/turbine/7/temperature'`.
- For references, you must specify either variables or input values. For example, the value for the `assetId` parameter can be `$input.TurbineInput.assetId1`.
- For a substitution template, you must use `${}`, and the template must be in single quotes. A substitution template can also contain a combination of literals, operators, functions, references, and substitution templates.

In the following example, the value for the `propertyAlias` parameter uses a substitution template.

```
'company/windfarm/${$input.TemperatureInput.sensorData.windfarmID}/
turbine/ ${$input.TemperatureInput.sensorData.turbineID}/temperature'
```

You must specify either `propertyAlias` or both `assetId` and `propertyId` to identify the target asset property in AWS IoT SiteWise.

For more information, see Expressions in the *AWS IoT Events Developer Guide*.

Type: IotSiteWiseAction object

Required: No

iotTopicPublish

Information required to publish the MQTT message through the AWS IoT message broker.

Type: IotTopicPublishAction object

Required: No

lambda

Calls a Lambda function, passing in information about the detector model instance and the event that triggered the action.

Type: LambdaAction object

Required: No

sns

Information required to publish the Amazon SNS message.

Type: SNSTopicPublishAction object

Required: No

sqs

Sends information about the detector model instance and the event that triggered the action to an Amazon SQS queue.

Type: SqsAction 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

AlarmCapabilities

Service: AWS IoT Events

Contains the configuration information of alarm state changes.

Contents

acknowledgeFlow

Specifies whether to get notified for alarm state changes.

Type: AcknowledgeFlow object

Required: No

initializationConfiguration

Specifies the default alarm state. The configuration applies to all alarms that were created based on this alarm model.

Type: InitializationConfiguration 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

AlarmEventActions

Service: AWS IoT Events

Contains information about one or more alarm actions.

Contents

alarmActions

Specifies one or more supported actions to receive notifications when the alarm state changes.

Type: Array of AlarmAction 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 Java V2
- AWS SDK for Ruby V3

AlarmModelSummary

Service: AWS IoT Events

Contains a summary of an alarm model.

Contents

alarmModelDescription

The description of the alarm model.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

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

creationTime

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

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 Java V2
- AWS SDK for Ruby V3

AlarmModelVersionSummary

Service: AWS IoT Events

Contains a summary of an alarm model version.

Contents

alarmModelArn

The ARN of the alarm model. For more information, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Type: String

Required: No

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 model was created, in the Unix epoch format.

Type: Timestamp

Required: No

lastUpdateTime

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

Type: Timestamp

Required: No

roleArn

The ARN of the IAM role that allows the alarm to perform actions and access AWS resources. For more information, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Type: String

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

Required: No

status

The status of the alarm model. The status can be one of the following values:

- `ACTIVE` - The alarm model is active and it's ready to evaluate data.
- `ACTIVATING` - AWS IoT Events is activating your alarm model. Activating an alarm model can take up to a few minutes.
- `INACTIVE` - The alarm model is inactive, so it isn't ready to evaluate data. Check your alarm model information and update the alarm model.
- `FAILED` - You couldn't create or update the alarm model. Check your alarm model information and try again.

Type: String

Valid Values: `ACTIVE | ACTIVATING | INACTIVE | FAILED`

Required: No

statusMessage

Contains information about the status of the alarm model 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 Java V2
- AWS SDK for Ruby V3

AlarmNotification

Service: AWS IoT Events

Contains information about one or more notification actions.

Contents

notificationActions

Contains the notification settings of an alarm model. The settings apply to all alarms that were created based on this alarm model.

Type: Array of NotificationAction objects

Array Members: Minimum number of 1 item.

Required: No

See Also

For 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

AlarmRule

Service: AWS IoT Events

Defines when your alarm is invoked.

Contents

simpleRule

A rule that compares an input property value to a threshold value with a comparison operator.

Type: SimpleRule 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

AnalysisResult

Service: AWS IoT Events

Contains the result of the analysis.

Contents

level

The severity level of the analysis result. Based on the severity level, analysis results fall into three general categories:

- `INFO` - An information result tells you about a significant field in your detector model. This type of result usually doesn't require immediate action.
- `WARNING` - A warning result draws special attention to fields that might cause issues for your detector model. We recommend that you review warnings and take necessary actions before you use your detector model in production environments. Otherwise, the detector model might not work as expected.
- `ERROR` - An error result notifies you about a problem found in your detector model. You must fix all errors before you can publish your detector model.

Type: String

Valid Values: `INFO | WARNING | ERROR`

Required: No

locations

Contains one or more locations that you can use to locate the fields in your detector model that the analysis result references.

Type: Array of AnalysisResultLocation objects

Required: No

message

Contains additional information about the analysis result.

Type: String

Required: No

type

The type of the analysis result. Analyses fall into the following types based on the validators used to generate the analysis result:

- `supported-actions` - You must specify AWS IoT Events supported actions that work with other AWS services in a supported AWS Region.
- `service-limits` - Resources or API operations can't exceed service quotas (also known as limits). Update your detector model or request a quota increase.
- `structure` - The detector model must follow a structure that AWS IoT Events supports.
- `expression-syntax` - Your expression must follow the required syntax.
- `data-type` - Data types referenced in the detector model must be compatible.
- `referenced-data` - You must define the data referenced in your detector model before you can use the data.
- `referenced-resource` - Resources that the detector model uses must be available.

For more information, see Running detector model analyses in the *AWS IoT Events Developer Guide*.

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

AnalysisResultLocation

Service: AWS IoT Events

Contains information that you can use to locate the field in your detector model that the analysis result references.

Contents

path

A JsonPath expression that identifies the error field in your detector model.

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

AssetPropertyTimestamp

Service: AWS IoT Events

A structure that contains timestamp information. For more information, see TimeInNanos in the *AWS IoT SiteWise API Reference*.

You must use expressions for all parameters in `AssetPropertyTimestamp`. The expressions accept literals, operators, functions, references, and substitution templates.

Examples

- For literal values, the expressions must contain single quotes. For example, the value for the `timeInSeconds` parameter can be `'1586400675'`.
- For references, you must specify either variables or input values. For example, the value for the `offsetInNanos` parameter can be `$variable.time`.
- For a substitution template, you must use `${}`, and the template must be in single quotes. A substitution template can also contain a combination of literals, operators, functions, references, and substitution templates.

  In the following example, the value for the `timeInSeconds` parameter uses a substitution template.

  ```
  '${$input.TemperatureInput.sensorData.timestamp / 1000}'
  ```

For more information, see Expressions in the *AWS IoT Events Developer Guide*.

Contents

timeInSeconds

The timestamp, in seconds, in the Unix epoch format. The valid range is between 1-31556889864403199.

Type: String

Required: Yes

offsetInNanos

The nanosecond offset converted from `timeInSeconds`. The valid range is between 0-999999999.

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

AssetPropertyValue

Service: AWS IoT Events

A structure that contains value information. For more information, see AssetPropertyValue in the *AWS IoT SiteWise API Reference*.

You must use expressions for all parameters in `AssetPropertyValue`. The expressions accept literals, operators, functions, references, and substitution templates.

Examples

- For literal values, the expressions must contain single quotes. For example, the value for the `quality` parameter can be `'GOOD'`.
- For references, you must specify either variables or input values. For example, the value for the `quality` parameter can be `$input.TemperatureInput.sensorData.quality`.

For more information, see Expressions in the *AWS IoT Events Developer Guide*.

Contents

quality

The quality of the asset property value. The value must be `'GOOD'`, `'BAD'`, or `'UNCERTAIN'`.

Type: String

Required: No

timestamp

The timestamp associated with the asset property value. The default is the current event time.

Type: AssetPropertyTimestamp object

Required: No

value

The value to send to an asset property.

Type: AssetPropertyVariant 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

AssetPropertyVariant

Service: AWS IoT Events

A structure that contains an asset property value. For more information, see Variant in the *AWS IoT SiteWise API Reference*.

You must use expressions for all parameters in `AssetPropertyVariant`. The expressions accept literals, operators, functions, references, and substitution templates.

Examples

- For literal values, the expressions must contain single quotes. For example, the value for the `integerValue` parameter can be `'100'`.
- For references, you must specify either variables or parameters. For example, the value for the `booleanValue` parameter can be `$variable.offline`.
- For a substitution template, you must use `${}`, and the template must be in single quotes. A substitution template can also contain a combination of literals, operators, functions, references, and substitution templates.

  In the following example, the value for the `doubleValue` parameter uses a substitution template.

  ```
  '${$input.TemperatureInput.sensorData.temperature * 6 / 5 + 32}'
  ```

For more information, see Expressions in the *AWS IoT Events Developer Guide*.

You must specify one of the following value types, depending on the `dataType` of the specified asset property. For more information, see AssetProperty in the *AWS IoT SiteWise API Reference*.

Contents

booleanValue

The asset property value is a Boolean value that must be `'TRUE'` or `'FALSE'`. You must use an expression, and the evaluated result should be a Boolean value.

Type: String

Required: No

doubleValue

The asset property value is a double. You must use an expression, and the evaluated result should be a double.

Type: String

Required: No

integerValue

The asset property value is an integer. You must use an expression, and the evaluated result should be an integer.

Type: String

Required: No

stringValue

The asset property value is a string. You must use an expression, and the evaluated result should be a string.

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

Attribute

Service: AWS IoT Events

The attributes from the JSON payload that are made available by the input. Inputs are derived from messages sent to the AWS IoT Events system using `BatchPutMessage`. Each such message contains a JSON payload. Those attributes (and their paired values) specified here are available for use in the `condition` expressions used by detectors.

Contents

jsonPath

An expression that specifies an attribute-value pair in a JSON structure. Use this to specify an attribute from the JSON payload that is made available by the input. Inputs are derived from messages sent to AWS IoT Events (`BatchPutMessage`). Each such message contains a JSON payload. The attribute (and its paired value) specified here are available for use in the `condition` expressions used by detectors.

Syntax: `<field-name>.<field-name>...`

Type: String

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

Pattern: `^((`[\w\-]+`)|([\w\-]+))(\.((`[\w-]+`)|([\w\-]+)))*$`

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

ClearTimerAction

Service: AWS IoT Events

Information needed to clear the timer.

Contents

timerName

The name of the timer to clear.

Type: String

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

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

DetectorDebugOption

Service: AWS IoT Events

The detector model and the specific detectors (instances) for which the logging level is given.

Contents

detectorModelName

The name of the detector model.

Type: String

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

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

Required: Yes

keyValue

The value of the input attribute key used to create the detector (the instance of the detector model).

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

DetectorModel

Service: AWS IoT Events

Information about the detector model.

Contents

detectorModelConfiguration

Information about how the detector is configured.

Type: DetectorModelConfiguration object

Required: No

detectorModelDefinition

Information that defines how a detector operates.

Type: DetectorModelDefinition 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

DetectorModelConfiguration

Service: AWS IoT Events

Information about how the detector model is configured.

Contents

creationTime

The time the detector model was created.

Type: Timestamp

Required: No

detectorModelArn

The ARN of the detector model.

Type: String

Required: No

detectorModelDescription

A brief description of the detector model.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

detectorModelName

The name of the detector model.

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.

Type: String

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

Required: No

evaluationMethod

Information about the order in which events are evaluated and how actions are executed.

Type: String

Valid Values: `BATCH | SERIAL`

Required: No

key

The value used to identify a detector instance. When a device or system sends input, a new detector instance with a unique key value is created. AWS IoT Events can continue to route input to its corresponding detector instance based on this identifying information.

This parameter uses a JSON-path expression to select the attribute-value pair in the message payload that is used for identification. To route the message to the correct detector instance, the device must send a message payload that contains the same attribute-value.

Type: String

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

Pattern: `^((`[\w\-]+`)|([\w\-]+))(\.((`[\w-]+`)|([\w\-]+)))*$`

Required: No

lastUpdateTime

The time the detector model was last updated.

Type: Timestamp

Required: No

roleArn

The ARN of the role that grants permission to AWS IoT Events to perform its operations.

Type: String

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

Required: No

status

The status of the detector model.

Type: String

Valid Values: `ACTIVE | ACTIVATING | INACTIVE | DEPRECATED | DRAFT | PAUSED | FAILED`

Required: No

See Also

For 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

DetectorModelDefinition

Service: AWS IoT Events

Information that defines how a detector operates.

Contents

initialStateName

The state that is entered at the creation of each detector (instance).

Type: String

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

Required: Yes

states

Information about the states of the detector.

Type: Array of State 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 Java V2
- AWS SDK for Ruby V3

DetectorModelSummary

Service: AWS IoT Events

Information about the detector model.

Contents

creationTime

The time the detector model was created.

Type: Timestamp

Required: No

detectorModelDescription

A brief description of the detector model.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

detectorModelName

The name of the detector model.

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

DetectorModelVersionSummary

Service: AWS IoT Events

Information about the detector model version.

Contents

creationTime

The time the detector model version was created.

Type: Timestamp

Required: No

detectorModelArn

The ARN of the detector model version.

Type: String

Required: No

detectorModelName

The name of the detector model.

Type: String

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

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

Required: No

detectorModelVersion

The ID of the detector model version.

Type: String

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

Required: No

evaluationMethod

Information about the order in which events are evaluated and how actions are executed.

Type: String

Valid Values: `BATCH | SERIAL`

Required: No

lastUpdateTime

The last time the detector model version was updated.

Type: Timestamp

Required: No

roleArn

The ARN of the role that grants the detector model permission to perform its tasks.

Type: String

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

Required: No

status

The status of the detector model version.

Type: String

Valid Values: `ACTIVE | ACTIVATING | INACTIVE | DEPRECATED | DRAFT | PAUSED | FAILED`

Required: No

See Also

For 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

DynamoDBAction

Service: AWS IoT Events

Defines an action to write to the Amazon DynamoDB table that you created. The standard action payload contains all the information about the detector model instance and the event that triggered the action. You can customize the payload. One column of the DynamoDB table receives all attribute-value pairs in the payload that you specify.

You must use expressions for all parameters in `DynamoDBAction`. The expressions accept literals, operators, functions, references, and substitution templates.

Examples

- For literal values, the expressions must contain single quotes. For example, the value for the `hashKeyType` parameter can be `'STRING'`.
- For references, you must specify either variables or input values. For example, the value for the `hashKeyField` parameter can be `$input.GreenhouseInput.name`.
- For a substitution template, you must use `${}`, and the template must be in single quotes. A substitution template can also contain a combination of literals, operators, functions, references, and substitution templates.

  In the following example, the value for the `hashKeyValue` parameter uses a substitution template.

  ```
  '${$input.GreenhouseInput.temperature * 6 / 5 + 32} in Fahrenheit'
  ```

- For a string concatenation, you must use `+`. A string concatenation can also contain a combination of literals, operators, functions, references, and substitution templates.

  In the following example, the value for the `tableName` parameter uses a string concatenation.

  ```
  'GreenhouseTemperatureTable ' + $input.GreenhouseInput.date
  ```

For more information, see Expressions in the *AWS IoT Events Developer Guide*.

If the defined payload type is a string, `DynamoDBAction` writes non-JSON data to the DynamoDB table as binary data. The DynamoDB console displays the data as Base64-encoded text. The value for the `payloadField` parameter is `<payload-field>_raw`.

Contents

hashKeyField

The name of the hash key (also called the partition key). The `hashKeyField` value must match the partition key of the target DynamoDB table.

Type: String

Required: Yes

hashKeyValue

The value of the hash key (also called the partition key).

Type: String

Required: Yes

tableName

The name of the DynamoDB table. The `tableName` value must match the table name of the target DynamoDB table.

Type: String

Required: Yes

hashKeyType

The data type for the hash key (also called the partition key). You can specify the following values:

- `'STRING'` - The hash key is a string.
- `'NUMBER'` - The hash key is a number.

If you don't specify `hashKeyType`, the default value is `'STRING'`.

Type: String

Required: No

operation

The type of operation to perform. You can specify the following values:

- `'INSERT'` - Insert data as a new item into the DynamoDB table. This item uses the specified hash key as a partition key. If you specified a range key, the item uses the range key as a sort key.
- `'UPDATE'` - Update an existing item of the DynamoDB table with new data. This item's partition key must match the specified hash key. If you specified a range key, the range key must match the item's sort key.
- `'DELETE'` - Delete an existing item of the DynamoDB table. This item's partition key must match the specified hash key. If you specified a range key, the range key must match the item's sort key.

If you don't specify this parameter, AWS IoT Events triggers the `'INSERT'` operation.

Type: String

Required: No

payload

Information needed to configure the payload.

By default, AWS IoT Events generates a standard payload in JSON for any action. This action payload contains all attribute-value pairs that have the information about the detector model instance and the event triggered the action. To configure the action payload, you can use `contentExpression`.

Type: Payload object

Required: No

payloadField

The name of the DynamoDB column that receives the action payload.

If you don't specify this parameter, the name of the DynamoDB column is `payload`.

Type: String

Required: No

rangeKeyField

The name of the range key (also called the sort key). The `rangeKeyField` value must match the sort key of the target DynamoDB table.

Type: String

Required: No

rangeKeyType

The data type for the range key (also called the sort key), You can specify the following values:

- `'STRING'` - The range key is a string.
- `'NUMBER'` - The range key is number.

If you don't specify `rangeKeyField`, the default value is `'STRING'`.

Type: String

Required: No

rangeKeyValue

The value of the range key (also called the sort key).

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

DynamoDBv2Action

Service: AWS IoT Events

Defines an action to write to the Amazon DynamoDB table that you created. The default action payload contains all the information about the detector model instance and the event that triggered the action. You can customize the payload. A separate column of the DynamoDB table receives one attribute-value pair in the payload that you specify.

You must use expressions for all parameters in `DynamoDBv2Action`. The expressions accept literals, operators, functions, references, and substitution templates.

Examples

- For literal values, the expressions must contain single quotes. For example, the value for the `tableName` parameter can be `'GreenhouseTemperatureTable'`.
- For references, you must specify either variables or input values. For example, the value for the `tableName` parameter can be `$variable.ddbtableName`.
- For a substitution template, you must use `${}`, and the template must be in single quotes. A substitution template can also contain a combination of literals, operators, functions, references, and substitution templates.

  In the following example, the value for the `contentExpression` parameter in `Payload` uses a substitution template.

  ```
  '{\"sensorID\": \"${$input.GreenhouseInput.sensor_id}\", \"temperature\": \"${$input.GreenhouseInput.temperature * 9 / 5 + 32}\"}'
  ```

- For a string concatenation, you must use `+`. A string concatenation can also contain a combination of literals, operators, functions, references, and substitution templates.

  In the following example, the value for the `tableName` parameter uses a string concatenation.

  ```
  'GreenhouseTemperatureTable ' + $input.GreenhouseInput.date
  ```

For more information, see Expressions in the *AWS IoT Events Developer Guide*.

The value for the `type` parameter in `Payload` must be `JSON`.

Contents

tableName

The name of the DynamoDB table.

Type: String

Required: Yes

payload

Information needed to configure the payload.

By default, AWS IoT Events generates a standard payload in JSON for any action. This action payload contains all attribute-value pairs that have the information about the detector model instance and the event triggered the action. To configure the action payload, you can use `contentExpression`.

Type: Payload 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

EmailConfiguration

Service: AWS IoT Events

Contains the configuration information of email notifications.

Contents

from

The email address that sends emails.

> **Important**
>
> If you use the AWS IoT Events managed AWS Lambda function to manage your emails, you must verify the email address that sends emails in Amazon SES.

Type: String

Required: Yes

recipients

Contains the information of one or more recipients who receive the emails.

> **Important**
>
> You must add the users that receive emails to your IAM Identity Center store.

Type: EmailRecipients object

Required: Yes

content

Contains the subject and message of an email.

Type: EmailContent 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

EmailContent

Service: AWS IoT Events

Contains the subject and message of an email.

Contents

additionalMessage

The message that you want to send. The message can be up to 200 characters.

Type: String

Required: No

subject

The subject of the email.

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

EmailRecipients

Service: AWS IoT Events

Contains the information of one or more recipients who receive the emails.

> **Important**
>
> You must add the users that receive emails to your IAM Identity Center store.

Contents

to

Specifies one or more recipients who receive the email.

Type: Array of RecipientDetail objects

Array Members: Minimum number of 1 item.

Required: No

See Also

For 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

Event

Service: AWS IoT Events

Specifies the `actions` to be performed when the `condition` evaluates to TRUE.

Contents

eventName

The name of the event.

Type: String

Length Constraints: Maximum length of 128.

Required: Yes

actions

The actions to be performed.

Type: Array of Action objects

Required: No

condition

Optional. The Boolean expression that, when TRUE, causes the `actions` to be performed. If not present, the actions are performed (=TRUE). If the expression result is not a Boolean value, the actions are not performed (=FALSE).

Type: String

Length Constraints: Maximum length of 512.

Required: No

See Also

For 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

FirehoseAction

Service: AWS IoT Events

Sends information about the detector model instance and the event that triggered the action to an Amazon Kinesis Data Firehose delivery stream.

Contents

deliveryStreamName

The name of the Kinesis Data Firehose delivery stream where the data is written.

Type: String

Required: Yes

payload

You can configure the action payload when you send a message to an Amazon Data Firehose delivery stream.

Type: Payload object

Required: No

separator

A character separator that is used to separate records written to the Kinesis Data Firehose delivery 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 Java V2
- AWS SDK for Ruby V3

InitializationConfiguration

Service: AWS IoT Events

Specifies the default alarm state. The configuration applies to all alarms that were created based on this alarm model.

Contents

disabledOnInitialization

The value must be TRUE or FALSE. If FALSE, all alarm instances created based on the alarm model are activated. The default value is TRUE.

Type: Boolean

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

Input

Service: AWS IoT Events

Information about the input.

Contents

inputConfiguration

Information about the configuration of an input.

Type: InputConfiguration object

Required: No

inputDefinition

The definition of the input.

Type: InputDefinition 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

InputConfiguration

Service: AWS IoT Events

Information about the configuration of an input.

Contents

creationTime

The time the input was created.

Type: Timestamp

Required: Yes

inputArn

The ARN of the input.

Type: String

Required: Yes

inputName

The name of the input.

Type: String

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

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

Required: Yes

lastUpdateTime

The last time the input was updated.

Type: Timestamp

Required: Yes

status

The status of the input.

Type: String

Valid Values: `CREATING | UPDATING | ACTIVE | DELETING`

Required: Yes

inputDescription

A brief description of the input.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

See Also

For 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

InputDefinition

Service: AWS IoT Events

The definition of the input.

Contents

attributes

The attributes from the JSON payload that are made available by the input. Inputs are derived from messages sent to the AWS IoT Events system using `BatchPutMessage`. Each such message contains a JSON payload, and those attributes (and their paired values) specified here are available for use in the `condition` expressions used by detectors that monitor this input.

Type: Array of Attribute objects

Array Members: Minimum number of 1 item. Maximum number of 200 items.

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

InputIdentifier

Service: AWS IoT Events

The identifier of the input.

Contents

iotEventsInputIdentifier

The identifier of the input routed to AWS IoT Events.

Type: IotEventsInputIdentifier object

Required: No

iotSiteWiseInputIdentifier

The identifier of the input routed from AWS IoT SiteWise.

Type: IotSiteWiseInputIdentifier 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

InputSummary

Service: AWS IoT Events

Information about the input.

Contents

creationTime

The time the input was created.

Type: Timestamp

Required: No

inputArn

The ARN of the input.

Type: String

Required: No

inputDescription

A brief description of the input.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

inputName

The name of the input.

Type: String

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

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

Required: No

lastUpdateTime

The last time the input was updated.

Type: Timestamp

Required: No

status

The status of the input.

Type: String

Valid Values: `CREATING | UPDATING | ACTIVE | DELETING`

Required: No

See Also

For 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

IotEventsAction

Service: AWS IoT Events

Sends an AWS IoT Events input, passing in information about the detector model instance and the event that triggered the action.

Contents

inputName

The name of the AWS IoT Events input where the data is sent.

Type: String

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

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

Required: Yes

payload

You can configure the action payload when you send a message to an AWS IoT Events input.

Type: Payload 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

IotEventsInputIdentifier

Service: AWS IoT Events

The identifier of the input routed to AWS IoT Events.

Contents

inputName

The name of the input routed to AWS IoT Events.

Type: String

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

Pattern: `^[a-zA-Z][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 Java V2
- AWS SDK for Ruby V3

IotSiteWiseAction

Service: AWS IoT Events

Sends information about the detector model instance and the event that triggered the action to a specified asset property in AWS IoT SiteWise.

You must use expressions for all parameters in `IotSiteWiseAction`. The expressions accept literals, operators, functions, references, and substitutions templates.

Examples

- For literal values, the expressions must contain single quotes. For example, the value for the `propertyAlias` parameter can be `'/company/windfarm/3/turbine/7/temperature'`.
- For references, you must specify either variables or input values. For example, the value for the `assetId` parameter can be `$input.TurbineInput.assetId1`.
- For a substitution template, you must use `${}`, and the template must be in single quotes. A substitution template can also contain a combination of literals, operators, functions, references, and substitution templates.

  In the following example, the value for the `propertyAlias` parameter uses a substitution template.

  ```
  'company/windfarm/${$input.TemperatureInput.sensorData.windfarmID}/
  turbine/ ${$input.TemperatureInput.sensorData.turbineID}/temperature'
  ```

You must specify either `propertyAlias` or both `assetId` and `propertyId` to identify the target asset property in AWS IoT SiteWise.

For more information, see Expressions in the *AWS IoT Events Developer Guide*.

Contents

assetId

The ID of the asset that has the specified property.

Type: String

Required: No

entryId

A unique identifier for this entry. You can use the entry ID to track which data entry causes an error in case of failure. The default is a new unique identifier.

Type: String

Required: No

propertyAlias

The alias of the asset property.

Type: String

Required: No

propertyId

The ID of the asset property.

Type: String

Required: No

propertyValue

The value to send to the asset property. This value contains timestamp, quality, and value (TQV) information.

Type: AssetPropertyValue 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

IotSiteWiseAssetModelPropertyIdentifier

Service: AWS IoT Events

The asset model property identifier of the input routed from AWS IoT SiteWise.

Contents

assetModelId

The ID of the AWS IoT SiteWise asset model.

Type: String

Required: Yes

propertyId

The ID of the AWS IoT SiteWise asset property.

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 Java V2
- AWS SDK for Ruby V3

IotSiteWiseInputIdentifier

Service: AWS IoT Events

The identifier of the input routed from AWS IoT SiteWise.

Contents

iotSiteWiseAssetModelPropertyIdentifier

The identifier of the AWS IoT SiteWise asset model property.

Type: IotSiteWiseAssetModelPropertyIdentifier 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

IotTopicPublishAction

Service: AWS IoT Events

Information required to publish the MQTT message through the AWS IoT message broker.

Contents

mqttTopic

The MQTT topic of the message. You can use a string expression that includes variables (`$variable.<variable-name>`) and input values (`$input.<input-name>.<path-to-datum>`) as the topic string.

Type: String

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

Required: Yes

payload

You can configure the action payload when you publish a message to an AWS IoT Core topic.

Type: Payload 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

LambdaAction

Service: AWS IoT Events

Calls a Lambda function, passing in information about the detector model instance and the event that triggered the action.

Contents

functionArn

The ARN of the Lambda function that is executed.

Type: String

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

Required: Yes

payload

You can configure the action payload when you send a message to a Lambda function.

Type: Payload 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

LoggingOptions

Service: AWS IoT Events

The values of the AWS IoT Events logging options.

Contents

enabled

If TRUE, logging is enabled for AWS IoT Events.

Type: Boolean

Required: Yes

level

The logging level.

Type: String

Valid Values: `ERROR | INFO | DEBUG`

Required: Yes

roleArn

The ARN of the role that grants permission to AWS IoT Events to perform logging.

Type: String

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

Required: Yes

detectorDebugOptions

Information that identifies those detector models and their detectors (instances) for which the logging level is given.

Type: Array of DetectorDebugOption objects

Array Members: Minimum number of 1 item.

Required: No

See Also

For 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

NotificationAction

Service: AWS IoT Events

Contains the notification settings of an alarm model. The settings apply to all alarms that were created based on this alarm model.

Contents

action

Specifies an AWS Lambda function to manage alarm notifications. You can create one or use the AWS Lambda function provided by AWS IoT Events.

Type: NotificationTargetActions object

Required: Yes

emailConfigurations

Contains the configuration information of email notifications.

Type: Array of EmailConfiguration objects

Array Members: Minimum number of 1 item.

Required: No

smsConfigurations

Contains the configuration information of SMS notifications.

Type: Array of SMSConfiguration objects

Array Members: Minimum number of 1 item.

Required: No

See Also

For 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

NotificationTargetActions

Service: AWS IoT Events

Specifies an AWS Lambda function to manage alarm notifications. You can create one or use the AWS Lambda function provided by AWS IoT Events.

Contents

lambdaAction

Calls a Lambda function, passing in information about the detector model instance and the event that triggered the action.

Type: LambdaAction 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

OnEnterLifecycle

Service: AWS IoT Events

When entering this state, perform these `actions` if the `condition` is TRUE.

Contents

events

Specifies the actions that are performed when the state is entered and the `condition` is TRUE.

Type: Array of Event 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 Java V2
- AWS SDK for Ruby V3

OnExitLifecycle

Service: AWS IoT Events

When exiting this state, perform these `actions` if the specified `condition` is TRUE.

Contents

events

Specifies the `actions` that are performed when the state is exited and the `condition` is TRUE.

Type: Array of Event 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 Java V2
- AWS SDK for Ruby V3

OnInputLifecycle

Service: AWS IoT Events

Specifies the actions performed when the `condition` evaluates to TRUE.

Contents

events

Specifies the actions performed when the `condition` evaluates to TRUE.

Type: Array of Event objects

Required: No

transitionEvents

Specifies the actions performed, and the next state entered, when a `condition` evaluates to TRUE.

Type: Array of TransitionEvent 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 Java V2
- AWS SDK for Ruby V3

Payload

Service: AWS IoT Events

Information needed to configure the payload.

By default, AWS IoT Events generates a standard payload in JSON for any action. This action payload contains all attribute-value pairs that have the information about the detector model instance and the event triggered the action. To configure the action payload, you can use `contentExpression`.

Contents

contentExpression

The content of the payload. You can use a string expression that includes quoted strings (`'<string>'`), variables (`$variable.<variable-name>`), input values (`$input.<input-name>.<path-to-datum>`), string concatenations, and quoted strings that contain `${}` as the content. The recommended maximum size of a content expression is 1 KB.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

type

The value of the payload type can be either `STRING` or `JSON`.

Type: String

Valid Values: `STRING | JSON`

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

RecipientDetail

Service: AWS IoT Events

The information that identifies the recipient.

Contents

ssoIdentity

The AWS IAM Identity Center (IAM Identity Center) authentication information.

Type: SSOIdentity 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

ResetTimerAction

Service: AWS IoT Events

Information required to reset the timer. The timer is reset to the previously evaluated result of the duration. The duration expression isn't reevaluated when you reset the timer.

Contents

timerName

The name of the timer to reset.

Type: String

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

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

RoutedResource

Service: AWS IoT Events

Contains information about the routed resource.

Contents

arn

The ARN of the routed resource. For more information, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Type: String

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

Required: No

name

The name of the routed resource.

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

SetTimerAction

Service: AWS IoT Events

Information needed to set the timer.

Contents

timerName

The name of the timer.

Type: String

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

Required: Yes

durationExpression

The duration of the timer, in seconds. You can use a string expression that includes numbers, variables (`$variable.<variable-name>`), and input values (`$input.<input-name>.<path-to-datum>`) as the duration. The range of the duration is 1-31622400 seconds. To ensure accuracy, the minimum duration is 60 seconds. The evaluated result of the duration is rounded down to the nearest whole number.

Type: String

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

Required: No

seconds

This member has been deprecated.

The number of seconds until the timer expires. The minimum value is 60 seconds to ensure accuracy. The maximum value is 31622400 seconds.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 31622400.

Required: No

See Also

For 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

SetVariableAction

Service: AWS IoT Events

Information about the variable and its new value.

Contents

value

The new value of the variable.

Type: String

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

Required: Yes

variableName

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

See Also

For 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

SimpleRule

Service: AWS IoT Events

A rule that compares an input property value to a threshold value with a comparison operator.

Contents

comparisonOperator

The comparison operator.

Type: String

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

Required: Yes

inputProperty

The value on the left side of the comparison operator. You can specify an AWS IoT Events input attribute as an input property.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Required: Yes

threshold

The value on the right side of the comparison operator. You can enter a number or specify an AWS IoT Events input attribute.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

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

SMSConfiguration

Service: AWS IoT Events

Contains the configuration information of SMS notifications.

Contents

recipients

Specifies one or more recipients who receive the message.

> **Important**
>
> You must add the users that receive SMS messages to your IAM Identity Center store.

Type: Array of RecipientDetail objects

Array Members: Minimum number of 1 item.

Required: Yes

additionalMessage

The message that you want to send. The message can be up to 200 characters.

Type: String

Required: No

senderId

The sender ID.

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

SNSTopicPublishAction

Service: AWS IoT Events

Information required to publish the Amazon SNS message.

Contents

targetArn

The ARN of the Amazon SNS target where the message is sent.

Type: String

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

Required: Yes

payload

You can configure the action payload when you send a message as an Amazon SNS push notification.

Type: Payload 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

SqsAction

Service: AWS IoT Events

Sends information about the detector model instance and the event that triggered the action to an Amazon SQS queue.

Contents

queueUrl

The URL of the SQS queue where the data is written.

Type: String

Required: Yes

payload

You can configure the action payload when you send a message to an Amazon SQS queue.

Type: Payload object

Required: No

useBase64

Set this to TRUE if you want the data to be base-64 encoded before it is written to the queue. Otherwise, set this to FALSE.

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 Java V2
- AWS SDK for Ruby V3

SSOIdentity

Service: AWS IoT Events

Contains information about your identity source in AWS IAM Identity Center. For more information, see the AWS IAM Identity Center User Guide.

Contents

identityStoreId

The ID of the IAM Identity Center identity store.

Type: String

Required: Yes

userId

The user ID.

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

State

Service: AWS IoT Events

Information that defines a state of a detector.

Contents

stateName

The name of the state.

Type: String

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

Required: Yes

onEnter

When entering this state, perform these `actions` if the `condition` is TRUE.

Type: OnEnterLifecycle object

Required: No

onExit

When exiting this state, perform these `actions` if the specified `condition` is TRUE.

Type: OnExitLifecycle object

Required: No

onInput

When an input is received and the `condition` is TRUE, perform the specified `actions`.

Type: OnInputLifecycle 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

Tag

Service: AWS IoT Events

Metadata that can be used to manage the resource.

Contents

key

The tag's key.

Type: String

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

Required: Yes

value

The tag's value.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

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

TransitionEvent

Service: AWS IoT Events

Specifies the actions performed and the next state entered when a `condition` evaluates to TRUE.

Contents

condition

Required. A Boolean expression that when TRUE causes the actions to be performed and the `nextState` to be entered.

Type: String

Length Constraints: Maximum length of 512.

Required: Yes

eventName

The name of the transition event.

Type: String

Length Constraints: Maximum length of 128.

Required: Yes

nextState

The next state to enter.

Type: String

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

Required: Yes

actions

The actions to be performed.

Type: Array of Action 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 Java V2
- AWS SDK for Ruby V3

AWS IoT Events Data

The following data types are supported by AWS IoT Events Data:

- 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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

Service: AWS IoT Events Data

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

InvalidClientTokenId

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

ValidationError

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

HTTP Status Code: 400