

# Amazon IoT Events



# Amazon IoT Events: API Reference

# Table of Contents

<b>Welcome</b> .....	<b>1</b>
Amazon IoT Events .....	1
Amazon IoT Events Data .....	1
<b>Actions</b> .....	<b>2</b>
Amazon IoT Events .....	3
CreateAlarmModel .....	5
CreateDetectorModel .....	15
CreateInput .....	30
DeleteAlarmModel .....	34
DeleteDetectorModel .....	37
DeleteInput .....	40
DescribeAlarmModel .....	43
DescribeDetectorModel .....	52
DescribeDetectorModelAnalysis .....	66
DescribeInput .....	69
DescribeLoggingOptions .....	72
GetDetectorModelAnalysisResults .....	75
ListAlarmModels .....	79
ListAlarmModelVersions .....	82
ListDetectorModels .....	86
ListDetectorModelVersions .....	89
ListInputRoutings .....	93
ListInputs .....	97
ListTagsForResource .....	100
PutLoggingOptions .....	103
StartDetectorModelAnalysis .....	106
TagResource .....	119
UntagResource .....	122
UpdateAlarmModel .....	125
UpdateDetectorModel .....	134
UpdateInput .....	149
Amazon IoT Events Data .....	152
BatchAcknowledgeAlarm .....	153
BatchDeleteDetector .....	156

BatchDisableAlarm .....	159
BatchEnableAlarm .....	162
BatchPutMessage .....	165
BatchResetAlarm .....	168
BatchSnoozeAlarm .....	171
BatchUpdateDetector .....	174
DescribeAlarm .....	177
DescribeDetector .....	181
ListAlarms .....	185
ListDetectors .....	188
<b>Data Types .....</b>	<b>192</b>
Amazon IoT Events .....	195
AcknowledgeFlow .....	198
Action .....	199
AlarmAction .....	202
AlarmCapabilities .....	207
AlarmEventActions .....	208
AlarmModelSummary .....	209
AlarmModelVersionSummary .....	211
AlarmNotification .....	214
AlarmRule .....	215
AnalysisResult .....	216
AnalysisResultLocation .....	218
AssetPropertyTimestamp .....	219
AssetPropertyValue .....	221
AssetPropertyVariant .....	223
Attribute .....	225
ClearTimerAction .....	226
DetectorDebugOption .....	227
DetectorModel .....	228
DetectorModelConfiguration .....	229
DetectorModelDefinition .....	232
DetectorModelSummary .....	233
DetectorModelVersionSummary .....	235
DynamoDBAction .....	238
DynamoDBv2Action .....	242

---

EmailConfiguration .....	244
EmailContent .....	246
EmailRecipients .....	247
Event .....	248
FirehoseAction .....	250
InitializationConfiguration .....	252
Input .....	253
InputConfiguration .....	254
InputDefinition .....	256
InputIdentifier .....	257
InputSummary .....	258
lotEventsAction .....	260
lotEventsInputIdentifier .....	261
lotSiteWiseAction .....	262
lotSiteWiseAssetModelPropertyIdentifier .....	264
lotSiteWiseInputIdentifier .....	265
lotTopicPublishAction .....	266
LambdaAction .....	267
LoggingOptions .....	268
NotificationAction .....	270
NotificationTargetActions .....	272
OnEnterLifecycle .....	273
OnExitLifecycle .....	274
OnInputLifecycle .....	275
Payload .....	276
RecipientDetail .....	278
ResetTimerAction .....	279
RoutedResource .....	280
SetTimerAction .....	281
SetVariableAction .....	283
SimpleRule .....	284
SMSConfiguration .....	286
SNSTopicPublishAction .....	288
SqsAction .....	289
SSOIdentity .....	290
State .....	291

---

Tag .....	293
TransitionEvent .....	294
Amazon IoT Events Data .....	295
AcknowledgeActionConfiguration .....	297
AcknowledgeAlarmActionRequest .....	298
Alarm .....	300
AlarmState .....	302
AlarmSummary .....	304
BatchAlarmActionErrorEntry .....	307
BatchDeleteDetectorErrorEntry .....	309
BatchPutMessageErrorEntry .....	311
BatchUpdateDetectorErrorEntry .....	313
CustomerAction .....	315
DeleteDetectorRequest .....	317
Detector .....	319
DetectorState .....	321
DetectorStateDefinition .....	322
DetectorStateSummary .....	324
DetectorSummary .....	325
DisableActionConfiguration .....	327
DisableAlarmActionRequest .....	328
EnableActionConfiguration .....	330
EnableAlarmActionRequest .....	331
Message .....	333
ResetActionConfiguration .....	335
ResetAlarmActionRequest .....	336
RuleEvaluation .....	338
SimpleRuleEvaluation .....	339
SnoozeActionConfiguration .....	341
SnoozeAlarmActionRequest .....	342
StateChangeConfiguration .....	344
SystemEvent .....	345
Timer .....	346
TimerDefinition .....	347
TimestampValue .....	348
UpdateDetectorRequest .....	349

---

Variable .....	351
VariableDefinition .....	352
<b>Common Parameters .....</b>	<b>353</b>
<b>Common Errors .....</b>	<b>356</b>

# Welcome

## Amazon IoT Events

Amazon IoT Events monitors your equipment or device fleets for failures or changes in operation, and triggers actions when such events occur. You can use Amazon IoT Events API operations to create, read, update, and delete inputs and detector models, and to list their versions.

## Amazon IoT Events Data

Amazon IoT Events monitors your equipment or device fleets for failures or changes in operation, and triggers actions when such events occur. You can use Amazon 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 Amazon IoT Events?](#) in the *Amazon IoT Events Developer Guide*.



# Actions

The following actions are supported by Amazon 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 Amazon IoT Events Data:

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

## Amazon IoT Events

The following actions are supported by Amazon 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: Amazon IoT Events

Creates an alarm model to monitor an Amazon 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 *Amazon 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. Amazon 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 Amazon resources. For more information, see [Amazon Resource Names \(ARNs\)](#) in the *Amazon 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 Amazon IoT Events resources](#) in the *Amazon 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 *Amazon 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** - Amazon 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 Amazon SDKs, see the following:

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

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

# CreateDetectorModel

Service: Amazon 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 Amazon 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 Amazon SDKs, see the following:

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

# CreateInput

Service: Amazon 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 Amazon SDKs, see the following:

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



# DeleteAlarmModel

Service: Amazon 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 Amazon SDKs, see the following:

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

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

# DeleteDetectorModel

Service: Amazon 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 Amazon SDKs, see the following:

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

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

# DeleteInput

Service: Amazon 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 Amazon SDKs, see the following:

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



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

# DescribeAlarmModel

Service: Amazon 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 *Amazon 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. Amazon 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 Amazon resources. For more information, see [Amazon Resource Names \(ARNs\)](#) in the *Amazon 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** - Amazon 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 Amazon SDKs, see the following:

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

# DescribeDetectorModel

Service: Amazon 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 Amazon SDKs, see the following:

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

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



# DescribeDetectorModelAnalysis

Service: Amazon IoT Events

Retrieves runtime information about a detector model analysis.

## Note

After Amazon 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** - Amazon IoT Events is analyzing your detector model. This process can take several minutes to complete.
- **COMPLETE** - Amazon IoT Events finished analyzing your detector model.
- **FAILED** - Amazon 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 Amazon SDKs, see the following:

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

# DescribeInput

Service: Amazon 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 Amazon SDKs, see the following:

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

# DescribeLoggingOptions

Service: Amazon IoT Events

Retrieves the current settings of the Amazon 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 Amazon 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 Amazon SDKs, see the following:

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

# GetDetectorModelAnalysisResults

Service: Amazon IoT Events

Retrieves one or more analysis results of the detector model.

## Note

After Amazon 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 Amazon SDKs, see the following:

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



# ListAlarmModels

Service: Amazon 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 Amazon SDKs, see the following:

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



# ListAlarmModelVersions

Service: Amazon 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 Amazon SDKs, see the following:

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



# ListDetectorModels

Service: Amazon 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 Amazon SDKs, see the following:

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

# ListDetectorModelVersions

Service: Amazon 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 Amazon SDKs, see the following:

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



# ListInputRoutings

Service: Amazon 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 Amazon SDKs, see the following:

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

# ListInputs

Service: Amazon 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 Amazon SDKs, see the following:

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

# ListTagsForResource

Service: Amazon 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 Amazon SDKs, see the following:

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

# PutLoggingOptions

Service: Amazon IoT Events

Sets or updates the Amazon 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 Amazon 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 Amazon SDKs, see the following:

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



# StartDetectorModelAnalysis

Service: Amazon IoT Events

Analyzes your detector model. For more information, see [Troubleshooting a detector model](#) in the *Amazon 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 Amazon SDKs, see the following:

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

# TagResource

Service: Amazon 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 Amazon SDKs, see the following:

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



# UntagResource

Service: Amazon 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 Amazon SDKs, see the following:

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

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

# UpdateAlarmModel

Service: Amazon 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 Amazon resources. For more information, see [Amazon Resource Names \(ARNs\)](#) in the *Amazon 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 *Amazon 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** - Amazon 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 Amazon SDKs, see the following:

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

# UpdateDetectorModel

Service: Amazon 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 Amazon 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 Amazon SDKs, see the following:

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

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

# UpdateInput

Service: Amazon 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 Amazon SDKs, see the following:

- [Amazon Command Line Interface](#)

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

## Amazon IoT Events Data

The following actions are supported by Amazon IoT Events Data:

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

# BatchAcknowledgeAlarm

Service: Amazon 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 Amazon SDKs, see the following:

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

# BatchDeleteDetector

Service: Amazon 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 Amazon SDKs, see the following:

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

# BatchDisableAlarm

Service: Amazon 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 Amazon SDKs, see the following:

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



# BatchEnableAlarm

Service: Amazon 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 Amazon SDKs, see the following:

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

# BatchPutMessage

Service: Amazon IoT Events Data

Sends a set of messages to the Amazon 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 Amazon SDKs, see the following:

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

# BatchResetAlarm

Service: Amazon 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 Amazon SDKs, see the following:

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

# BatchSnoozeAlarm

Service: Amazon 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 Amazon SDKs, see the following:

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

# BatchUpdateDetector

Service: Amazon 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 Amazon SDKs, see the following:

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

# DescribeAlarm

Service: Amazon 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 Amazon SDKs, see the following:

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

# DescribeDetector

Service: Amazon 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 Amazon SDKs, see the following:

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



# ListAlarms

Service: Amazon 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 Amazon SDKs, see the following:

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

# ListDetectors

Service: Amazon 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 Amazon SDKs, see the following:

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

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

# Data Types

The following data types are supported by Amazon 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](#)
- [lotEventsAction](#)
- [lotEventsInputIdentifier](#)
- [lotSiteWiseAction](#)
- [lotSiteWiseAssetModelPropertyIdentifier](#)
- [lotSiteWiseInputIdentifier](#)
- [lotTopicPublishAction](#)
- [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 Amazon 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](#)

## Amazon IoT Events

The following data types are supported by Amazon 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](#)
- [lotEventsAction](#)
- [lotEventsInputIdentifier](#)
- [lotSiteWiseAction](#)
- [lotSiteWiseAssetModelPropertyIdentifier](#)
- [lotSiteWiseInputIdentifier](#)
- [lotTopicPublishAction](#)
- [LambdaAction](#)
- [LoggingOptions](#)
- [NotificationAction](#)

- [NotificationTargetActions](#)
- [OnEnterLifecycle](#)
- [OnExitLifecycle](#)
- [OnInputLifecycle](#)
- [Payload](#)
- [RecipientDetail](#)
- [ResetTimerAction](#)
- [RoutedResource](#)
- [SetTimerAction](#)
- [SetVariableAction](#)
- [SimpleRule](#)
- [SMSConfiguration](#)
- [SNSTopicPublishAction](#)
- [SqsAction](#)
- [SSOIdentity](#)
- [State](#)
- [Tag](#)
- [TransitionEvent](#)

# AcknowledgeFlow

Service: Amazon 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 Amazon SDKs, see the following:

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

## Action

Service: Amazon 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 *Amazon 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 *Amazon 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 Amazon IoT Events input, which passes information about the detector model instance and the event that triggered the action.

Type: [lotEventsAction](#) object

Required: No

### **iotSiteWise**

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

Type: [lotSiteWiseAction](#) object

Required: No

### **iotTopicPublish**

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

Type: [lotTopicPublishAction](#) 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 Amazon SDKs, see the following:

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



# AlarmAction

Service: Amazon 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 *Amazon 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 *Amazon 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 Amazon 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 Amazon 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 Amazon IoT SiteWise.

For more information, see [Expressions](#) in the *Amazon IoT Events Developer Guide*.

Type: [lotSiteWiseAction](#) object

Required: No

### **iotTopicPublish**

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

Type: [lotTopicPublishAction](#) 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 Amazon SDKs, see the following:

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

# AlarmCapabilities

Service: Amazon 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 Amazon SDKs, see the following:

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

# AlarmEventActions

Service: Amazon 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 Amazon SDKs, see the following:

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

# AlarmModelSummary

Service: Amazon 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 Amazon SDKs, see the following:

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



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

# AlarmModelVersionSummary

Service: Amazon 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 *Amazon 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 Amazon resources. For more information, see [Amazon Resource Names \(ARNs\)](#) in the *Amazon 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** - Amazon 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 Amazon SDKs, see the following:

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

# AlarmNotification

Service: Amazon 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 Amazon SDKs, see the following:

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

# AlarmRule

Service: Amazon 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 Amazon SDKs, see the following:

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

# AnalysisResult

Service: Amazon 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 Amazon IoT Events supported actions that work with other Amazon services in a supported Amazon Web Services 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 Amazon 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 *Amazon IoT Events Developer Guide*.

Type: String

Required: No

## See Also

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

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



# AnalysisResultLocation

Service: Amazon 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 Amazon SDKs, see the following:

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

# AssetPropertyTimestamp

Service: Amazon IoT Events

A structure that contains timestamp information. For more information, see [TimeInNanos](#) in the *Amazon 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 *Amazon 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 Amazon SDKs, see the following:

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

# AssetPropertyValue

Service: Amazon IoT Events

A structure that contains value information. For more information, see [AssetPropertyValue](#) in the *Amazon 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 *Amazon 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 Amazon SDKs, see the following:

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

# AssetPropertyVariant

Service: Amazon IoT Events

A structure that contains an asset property value. For more information, see [Variant](#) in the *Amazon 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 *Amazon 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 *Amazon 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 Amazon SDKs, see the following:

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

# Attribute

Service: Amazon IoT Events

The attributes from the JSON payload that are made available by the input. Inputs are derived from messages sent to the Amazon 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 Amazon 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 Amazon SDKs, see the following:

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



# ClearTimerAction

Service: Amazon 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 Amazon SDKs, see the following:

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

# DetectorDebugOption

Service: Amazon 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 Amazon SDKs, see the following:

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

# DetectorModel

Service: Amazon 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 Amazon SDKs, see the following:

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

# DetectorModelConfiguration

Service: Amazon 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. Amazon 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 Amazon 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 Amazon SDKs, see the following:

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

# DetectorModelDefinition

Service: Amazon 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 Amazon SDKs, see the following:

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

# DetectorModelSummary

Service: Amazon 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 Amazon SDKs, see the following:

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



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

# DetectorModelVersionSummary

Service: Amazon 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 Amazon SDKs, see the following:

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

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

# DynamoDBAction

Service: Amazon 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 *Amazon 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, Amazon IoT Events triggers the 'INSERT' operation.

Type: String

Required: No

## payload

Information needed to configure the payload.

By default, Amazon 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 Amazon SDKs, see the following:

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



## DynamoDBv2Action

Service: Amazon 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 *Amazon 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, Amazon 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 Amazon SDKs, see the following:

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

# EmailConfiguration

Service: Amazon IoT Events

Contains the configuration information of email notifications.

## Contents

### from

The email address that sends emails.

#### Important

If you use the Amazon IoT Events managed Amazon 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 Amazon SDKs, see the following:

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

# EmailContent

Service: Amazon 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 Amazon SDKs, see the following:

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

# EmailRecipients

Service: Amazon 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 Amazon SDKs, see the following:

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

## Event

Service: Amazon 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 Amazon SDKs, see the following:

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

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



# FirehoseAction

Service: Amazon 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 Amazon SDKs, see the following:

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

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

# InitializationConfiguration

Service: Amazon 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 Amazon SDKs, see the following:

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

# Input

Service: Amazon 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 Amazon SDKs, see the following:

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

# InputConfiguration

Service: Amazon 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 Amazon SDKs, see the following:

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

# InputDefinition

Service: Amazon 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 Amazon 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 Amazon SDKs, see the following:

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

# InputIdentifier

Service: Amazon IoT Events

The identifier of the input.

## Contents

### iotEventsInputIdentifier

The identifier of the input routed to Amazon IoT Events.

Type: [iotEventsInputIdentifier](#) object

Required: No

### iotSiteWiseInputIdentifier

The identifier of the input routed from Amazon IoT SiteWise.

Type: [iotSiteWiseInputIdentifier](#) object

Required: No

## See Also

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

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



# InputSummary

Service: Amazon 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 Amazon SDKs, see the following:

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

# IoTEventsAction

Service: Amazon IoT Events

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

## Contents

### inputName

The name of the Amazon 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 Amazon IoT Events input.

Type: [Payload](#) object

Required: No

## See Also

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

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

# lotEventsInputIdentifier

Service: Amazon IoT Events

The identifier of the input routed to Amazon IoT Events.

## Contents

### inputName

The name of the input routed to Amazon 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 Amazon SDKs, see the following:

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

# IoTSiteWiseAction

Service: Amazon IoT Events

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

For more information, see [Expressions](#) in the *Amazon 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 Amazon SDKs, see the following:

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

# lotSiteWiseAssetModelPropertyIdentifier

Service: Amazon IoT Events

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

## Contents

### assetModelId

The ID of the Amazon IoT SiteWise asset model.

Type: String

Required: Yes

### propertyId

The ID of the Amazon IoT SiteWise asset property.

Type: String

Required: Yes

## See Also

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

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

# lotSiteWiseInputIdentifier

Service: Amazon IoT Events

The identifier of the input routed from Amazon IoT SiteWise.

## Contents

### iotSiteWiseAssetModelPropertyIdentifier

The identifier of the Amazon IoT SiteWise asset model property.

Type: [lotSiteWiseAssetModelPropertyIdentifier](#) object

Required: No

## See Also

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

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



# IoTTopicPublishAction

Service: Amazon IoT Events

Information required to publish the MQTT message through the Amazon 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 Amazon IoT Core topic.

Type: [Payload](#) object

Required: No

## See Also

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

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

# LambdaAction

Service: Amazon 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 Amazon SDKs, see the following:

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

# LoggingOptions

Service: Amazon IoT Events

The values of the Amazon IoT Events logging options.

## Contents

### enabled

If TRUE, logging is enabled for Amazon 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 Amazon 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 Amazon SDKs, see the following:

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

# NotificationAction

Service: Amazon 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 Amazon Lambda function to manage alarm notifications. You can create one or use the [Amazon Lambda function provided by Amazon 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 Amazon SDKs, see the following:

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

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

# NotificationTargetActions

Service: Amazon IoT Events

Specifies an Amazon Lambda function to manage alarm notifications. You can create one or use the [Amazon Lambda function provided by Amazon 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 Amazon SDKs, see the following:

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

# OnEnterLifecycle

Service: Amazon 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 Amazon SDKs, see the following:

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



# OnExitLifecycle

Service: Amazon 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 Amazon SDKs, see the following:

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

# OnInputLifecycle

Service: Amazon 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 Amazon SDKs, see the following:

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

# Payload

Service: Amazon IoT Events

Information needed to configure the payload.

By default, Amazon 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 Amazon SDKs, see the following:

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

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

# RecipientDetail

Service: Amazon IoT Events

The information that identifies the recipient.

## Contents

### ssoidentity

The Amazon 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 Amazon SDKs, see the following:

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

# ResetTimerAction

Service: Amazon 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 Amazon SDKs, see the following:

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

# RoutedResource

Service: Amazon 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 *Amazon 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 Amazon SDKs, see the following:

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

# SetTimerAction

Service: Amazon 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 Amazon SDKs, see the following:

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

# SetVariableAction

Service: Amazon 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 Amazon SDKs, see the following:

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

# SimpleRule

Service: Amazon 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 Amazon 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 Amazon 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 Amazon SDKs, see the following:

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

# SMSConfiguration

Service: Amazon 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 Amazon SDKs, see the following:

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

# SNSTopicPublishAction

Service: Amazon 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 Amazon SDKs, see the following:

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

# SqsAction

Service: Amazon 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 Amazon SDKs, see the following:

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



# SSOIdentity

Service: Amazon IoT Events

Contains information about your identity source in Amazon IAM Identity Center. For more information, see the [Amazon 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 Amazon SDKs, see the following:

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

## State

Service: Amazon 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 Amazon SDKs, see the following:

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

# Tag

Service: Amazon 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 Amazon SDKs, see the following:

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

# TransitionEvent

Service: Amazon 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 Amazon SDKs, see the following:

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

## Amazon IoT Events Data

The following data types are supported by Amazon 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: Amazon 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 Amazon SDKs, see the following:

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



# AcknowledgeAlarmActionRequest

Service: Amazon 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 Amazon SDKs, see the following:

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

# Alarm

Service: Amazon 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 Amazon SDKs, see the following:

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

# AlarmState

Service: Amazon 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 Amazon SDKs, see the following:

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

# AlarmSummary

Service: Amazon 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 Amazon SDKs, see the following:



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

# BatchAlarmActionErrorEntry

Service: Amazon 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 Amazon SDKs, see the following:

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

# BatchDeleteDetectorErrorEntry

Service: Amazon 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 Amazon SDKs, see the following:

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

# BatchPutMessageErrorEntry

Service: Amazon 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 Amazon SDKs, see the following:

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

# BatchUpdateDetectorErrorEntry

Service: Amazon 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 Amazon SDKs, see the following:



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

# CustomerAction

Service: Amazon 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 Amazon SDKs, see the following:

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

# DeleteDetectorRequest

Service: Amazon 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 Amazon SDKs, see the following:

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

# Detector

Service: Amazon 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 Amazon SDKs, see the following:

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

# DetectorState

Service: Amazon 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 Amazon SDKs, see the following:

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



# DetectorStateDefinition

Service: Amazon 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 Amazon SDKs, see the following:

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



# DetectorStateSummary

Service: Amazon 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 Amazon SDKs, see the following:

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

## DetectorSummary

Service: Amazon 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 Amazon SDKs, see the following:

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

# DisableActionConfiguration

Service: Amazon 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 Amazon SDKs, see the following:

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

# DisableAlarmActionRequest

Service: Amazon 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 Amazon SDKs, see the following:

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



# EnableActionConfiguration

Service: Amazon 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 Amazon SDKs, see the following:

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

# EnableAlarmActionRequest

Service: Amazon 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 Amazon SDKs, see the following:

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

# Message

Service: Amazon 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 Amazon SDKs, see the following:

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

# ResetActionConfiguration

Service: Amazon 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 Amazon SDKs, see the following:

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

# ResetAlarmActionRequest

Service: Amazon 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 Amazon SDKs, see the following:

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



# RuleEvaluation

Service: Amazon 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 Amazon SDKs, see the following:

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

# SimpleRuleEvaluation

Service: Amazon 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 Amazon SDKs, see the following:

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



# SnoozeActionConfiguration

Service: Amazon 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 Amazon SDKs, see the following:

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

# SnoozeAlarmActionRequest

Service: Amazon 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 Amazon SDKs, see the following:

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

# StateChangeConfiguration

Service: Amazon 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 Amazon SDKs, see the following:

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

# SystemEvent

Service: Amazon 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 Amazon SDKs, see the following:

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



# Timer

Service: Amazon 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 Amazon SDKs, see the following:

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

## TimerDefinition

Service: Amazon 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 Amazon SDKs, see the following:

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

# TimestampValue

Service: Amazon 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 Amazon SDKs, see the following:

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

# UpdateDetectorRequest

Service: Amazon 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 Amazon SDKs, see the following:

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

## Variable

Service: Amazon 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 Amazon SDKs, see the following:

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

## VariableDefinition

Service: Amazon 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 Amazon SDKs, see the following:

- [Amazon SDK for C++](#)
- [Amazon SDK for Java V2](#)
- [Amazon 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 Amazon 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 Amazon 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 Amazon 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 Amazon Security Token Service (Amazon STS). For a list of services that support temporary security credentials from Amazon STS, see [Amazon Web Services services that work with IAM](#) in the *IAM User Guide*.

Condition: If you're using temporary security credentials from Amazon 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 Amazon 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 Amazon 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 Amazon standards.

HTTP Status Code: 400

## **InternalFailure**

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

HTTP Status Code: 500

## **InvalidAction**

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

HTTP Status Code: 400

## **InvalidClientId**

The X.509 certificate or Amazon 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 Amazon 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 Amazon service.

HTTP Status Code: 400