API Reference

AWS IoT SiteWise

API Version 2019-12-02

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AWS IoT SiteWise: API Reference

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Welcome to the AWS IoT SiteWise API Reference. AWS IoT SiteWise is an AWS service that connects Industrial Internet of Things (IIoT) devices to the power of the AWS Cloud. For more information, see the AWS IoT SiteWise User Guide. For information about AWS IoT SiteWise quotas, see Quotas in the *AWS IoT SiteWise User Guide*.

This document was last published on September 6, 2025.

Actions

The following actions are supported:

- AssociateAssets
- AssociateTimeSeriesToAssetProperty
- BatchAssociateProjectAssets
- BatchDisassociateProjectAssets
- BatchGetAssetPropertyAggregates
- BatchGetAssetPropertyValue
- BatchGetAssetPropertyValueHistory
- BatchPutAssetPropertyValue
- CreateAccessPolicy
- CreateAsset
- CreateAssetModel
- CreateAssetModelCompositeModel
- CreateBulkImportJob
- CreateComputationModel
- CreateDashboard
- CreateDataset
- CreateGateway
- CreatePortal
- CreateProject
- DeleteAccessPolicy
- DeleteAsset
- DeleteAssetModel
- DeleteAssetModelCompositeModel
- DeleteAssetModelInterfaceRelationship
- DeleteComputationModel
- DeleteDashboard
- DeleteDataset

- DeleteGateway
- DeletePortal
- DeleteProject
- DeleteTimeSeries
- DescribeAccessPolicy
- DescribeAction
- DescribeAsset
- DescribeAssetCompositeModel
- DescribeAssetModel
- DescribeAssetModelCompositeModel
- DescribeAssetModelInterfaceRelationship
- DescribeAssetProperty
- DescribeBulkImportJob
- DescribeComputationModel
- DescribeComputationModelExecutionSummary
- DescribeDashboard
- DescribeDataset
- DescribeDefaultEncryptionConfiguration
- DescribeExecution
- DescribeGateway
- DescribeGatewayCapabilityConfiguration
- DescribeLoggingOptions
- DescribePortal
- DescribeProject
- DescribeStorageConfiguration
- DescribeTimeSeries
- DisassociateAssets
- DisassociateTimeSeriesFromAssetProperty
- ExecuteAction
- ExecuteQuery

- GetAssetPropertyAggregates
- GetAssetPropertyValue
- GetAssetPropertyValueHistory
- GetInterpolatedAssetPropertyValues
- InvokeAssistant
- ListAccessPolicies
- ListActions
- ListAssetModelCompositeModels
- ListAssetModelProperties
- ListAssetModels
- ListAssetProperties
- ListAssetRelationships
- ListAssets
- ListAssociatedAssets
- ListBulkImportJobs
- ListCompositionRelationships
- ListComputationModelDataBindingUsages
- ListComputationModelResolveToResources
- ListComputationModels
- ListDashboards
- ListDatasets
- ListExecutions
- ListGateways
- ListInterfaceRelationships
- ListPortals
- ListProjectAssets
- ListProjects
- ListTagsForResource
- ListTimeSeries
- PutAssetModelInterfaceRelationship

- PutDefaultEncryptionConfiguration
- PutLoggingOptions
- PutStorageConfiguration
- TagResource
- UntagResource
- UpdateAccessPolicy
- UpdateAsset
- UpdateAssetModel
- UpdateAssetModelCompositeModel
- UpdateAssetProperty
- UpdateComputationModel
- UpdateDashboard
- UpdateDataset
- UpdateGateway
- UpdateGatewayCapabilityConfiguration
- UpdatePortal
- UpdateProject

AssociateAssets

Associates a child asset with the given parent asset through a hierarchy defined in the parent asset's model. For more information, see Associating assets in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
POST /assets/assetId/associate HTTP/1.1
Content-type: application/json

{
   "childAssetId": "string",
   "clientToken": "string",
   "hierarchyId": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the parent asset. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

childAssetId

The ID of the child asset to be associated. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

hierarchyId

The ID of a hierarchy in the parent asset's model. (This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.) Hierarchies allow different groupings of assets to be formed that all come from the same asset model. For more information, see Asset hierarchies in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

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.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

AssociateTimeSeriesToAssetProperty

Associates a time series (data stream) with an asset property.

Request Syntax

```
POST /timeseries/associate/?alias=alias&assetId=assetId&propertyId=propertyId HTTP/1.1
Content-type: application/json

{
   "clientToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

alias

The alias that identifies the time series.

Length Constraints: Minimum length of 1.

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

assetId

The ID of the asset in which the asset property was created. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

propertyId

The ID of the asset property. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

BatchAssociateProjectAssets

Associates a group (batch) of assets with an AWS IoT SiteWise Monitor project.

Request Syntax

```
POST /projects/projectId/assets/associate HTTP/1.1
Content-type: application/json

{
   "assetIds": [ "string" ],
   "clientToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

projectId

The ID of the project to which to associate the assets.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

assetIds

The IDs of the assets to be associated to the project.

Type: Array of strings

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

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

Response Syntax

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

{
   "errors": [
      {
         "assetId": "string",
         "code": "string",
         "message": "string"
      }
   ]
}
```

Response Elements

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

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

errors

A list of associated error information, if any.

Type: Array of AssetErrorDetails objects

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

BatchDisassociateProjectAssets

Disassociates a group (batch) of assets from an AWS IoT SiteWise Monitor project.

Request Syntax

```
POST /projects/projectId/assets/disassociate HTTP/1.1
Content-type: application/json

{
   "assetIds": [ "string" ],
   "clientToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

projectId

The ID of the project from which to disassociate the assets.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

assetIds

The IDs of the assets to be disassociated from the project.

Type: Array of strings

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

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

Response Syntax

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

{
   "errors": [
      {
         "assetId": "string",
         "code": "string",
         "message": "string"
      }
   ]
}
```

Response Elements

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

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

errors

A list of associated error information, if any.

Type: Array of AssetErrorDetails objects

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

BatchGetAssetPropertyAggregates

Gets aggregated values (for example, average, minimum, and maximum) for one or more asset properties. For more information, see Querying aggregates in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
POST /properties/batch/aggregates HTTP/1.1
Content-type: application/json

{
   "entries": [
      {
         "aggregateTypes": [ "string" ],
         "assetId": "string",
         "endDate": number,
         "entryId": "string",
         "propertyAlias": "string",
         "propertyId": "string",
         "qualities": [ "string" ],
         "resolution": "string",
         "startDate": number,
         "timeOrdering": "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.

entries

The list of asset property aggregate entries for the batch get request. You can specify up to 16 entries per request.

Type: Array of BatchGetAssetPropertyAggregatesEntry objects

Required: Yes

maxResults

The maximum number of results to return for each paginated request. A result set is returned in the two cases, whichever occurs first.

- The size of the result set is equal to 1 MB.
- The number of data points in the result set is equal to the value of `maxResults`. The maximum value of `maxResults` is 4000.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

nextToken

The token to be used for the next set of paginated results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Required: No

Response Syntax

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

{
   "errorEntries": [
      {
         "entryId": "string",
         "errorCode": "string",
         "errorMessage": "string"
      }
```

```
    ],
    "nextToken": "string",
    "skippedEntries": [
       {
          "completionStatus": "string",
          "entryId": "string",
          "errorInfo": {
             "errorCode": "string",
             "errorTimestamp": number
          }
       }
    ],
    "successEntries": [
       {
          "aggregatedValues": [
             {
                "quality": "string",
                "timestamp": number,
                "value": {
                   "average": number,
                   "count": number,
                   "maximum": number,
                   "minimum": number,
                   "standardDeviation": number,
                   "sum": number
                }
             }
          ],
          "entryId": "string"
       }
    ]
}
```

Response Elements

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

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

errorEntries

A list of the errors (if any) associated with the batch request. Each error entry contains the `entryId` of the entry that failed.

Type: Array of BatchGetAssetPropertyAggregatesErrorEntry objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

skippedEntries

A list of entries that were not processed by this batch request. because these entries had been completely processed by previous paginated requests. Each skipped entry contains the `entryId` of the entry that skipped.

Type: Array of BatchGetAssetPropertyAggregatesSkippedEntry objects

successEntries

A list of entries that were processed successfully by this batch request. Each success entry contains the `entryId` of the entry that succeeded and the latest query result.

Type: Array of BatchGetAssetPropertyAggregatesSuccessEntry objects

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ServiceUnavailableException

The requested service is unavailable.

HTTP Status Code: 503

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

Examples

Example

The following example uses the AWS Command Line Interface (AWS CLI) to retrieve the average temperature value for two wind turbines between April 26, 2021 at midnight and May 3, 2021 at midnight in Pacific Time (PT). The following also shows the contents of the `batch-get-asset-property-aggregates.json` file.

Sample Request

```
aws iotsitewise batch-get-asset-property-aggregates --cli-input-json file://batch-get-asset-property-aggregates.json
```

```
{
   "entries":[
      {
         "entryId":"1",
         "aggregateTypes":[
            "AVERAGE"
         ],
         "assetId":"a1b2c3d4-5678-90ab-cdef-11111EXAMPLE",
         "propertyId":"a1b2c3d4-5678-90ab-cdef-22222EXAMPLE",
         "startDate":1619420400,
         "endDate":1620025200,
```

```
         "qualities":[
            "GOOD"
         ],
         "resolution":"1h"
      },
      {
         "entryId":"2",
         "aggregateTypes":[
            "AVERAGE"
         ],
         "assetId":"a1b2c3d4-5678-90ab-cdef-33333EXAMPLE",
         "propertyId":"a1b2c3d4-5678-90ab-cdef-44444EXAMPLE",
         "startDate":1619420400,
         "endDate":1620025200,
         "qualities":[
            "GOOD"
         ],
         "resolution":"1h"
      }
   ]
}
```

Sample Response

```
{
   "errorEntries" :[ ],
   "successEntries" :[
      {
         "entryId" :"1",
         "aggregatedValues" :[
            {
               "timestamp" :1649348973.0,
               "quality" :"GOOD",
               "value" :{
                  "average" :1430.7175
               }
            }
         ]
      },
      {
         "entryId" :"2",
         "aggregatedValues" :[
            {
```

```
                "timestamp" :1649348973.0,
                "quality" :"GOOD",
                "value" :{
                   "average" :1425.9525
                }
             }
          ]
       }
   ],
   "skippedEntries" :[ ]
}
```

See Also

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

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

BatchGetAssetPropertyValue

Gets the current value for one or more asset properties. For more information, see Querying current values in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
POST /properties/batch/latest HTTP/1.1
Content-type: application/json

{
   "entries": [
      {
         "assetId": "string",
         "entryId": "string",
         "propertyAlias": "string",
         "propertyId": "string"
      }
   ],
   "nextToken": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

entries

The list of asset property value entries for the batch get request. You can specify up to 128 entries per request.

Type: Array of BatchGetAssetPropertyValueEntry objects

Required: Yes

nextToken

The token to be used for the next set of paginated results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Required: No

Response Syntax

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

{
   "errorEntries": [
      {
         "entryId": "string",
         "errorCode": "string",
         "errorMessage": "string"
      }
   ],
   "nextToken": "string",
   "skippedEntries": [
      {
         "completionStatus": "string",
         "entryId": "string",
         "errorInfo": {
            "errorCode": "string",
            "errorTimestamp": number
         }
      }
   ],
   "successEntries": [
      {
         "assetPropertyValue": {
            "quality": "string",
            "timestamp": {
               "offsetInNanos": number,
               "timeInSeconds": number
            },
            "value": {
               "booleanValue": boolean,
               "doubleValue": number,
```

```
                "integerValue": number,
                "nullValue": {
                   "valueType": "string"
                },
                "stringValue": "string"
             }
          },
          "entryId": "string"
       }
    ]
}
```

Response Elements

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

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

errorEntries

A list of the errors (if any) associated with the batch request. Each error entry contains the `entryId` of the entry that failed.

Type: Array of BatchGetAssetPropertyValueErrorEntry objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

skippedEntries

A list of entries that were not processed by this batch request. because these entries had been completely processed by previous paginated requests. Each skipped entry contains the `entryId` of the entry that skipped.

Type: Array of BatchGetAssetPropertyValueSkippedEntry objects

successEntries

A list of entries that were processed successfully by this batch request. Each success entry contains the `entryId` of the entry that succeeded and the latest query result.

Type: Array of BatchGetAssetPropertyValueSuccessEntry objects

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ServiceUnavailableException

The requested service is unavailable.

HTTP Status Code: 503

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

Examples

Example

The following example uses the AWS Command Line Interface (AWS CLI) to retrieve the current temperature value for two wind turbines. The following also shows the contents of the `batch-get-asset-property-value.json` file.

Sample Request

```
aws iotsitewise batch-get-asset-property-value --cli-input-json file://batch-get-asset-property-value.json
```

```
{
   "entries":[
      {
         "entryId":"1",
         "assetId":"a1b2c3d4-5678-90ab-cdef-11111EXAMPLE",
         "propertyId":"a1b2c3d4-5678-90ab-cdef-22222EXAMPLE"
      },
      {
         "entryId":"2",
         "assetId":"a1b2c3d4-5678-90ab-cdef-33333EXAMPLE",
         "propertyId":"a1b2c3d4-5678-90ab-cdef-44444EXAMPLE"
      }
   ]
}
```

Sample Response

```
{
   "errorEntries":[

   ],
   "successEntries":[
      {
         "entryId":"1",
         "propertyValue":{
            "value":{
               "doubleValue":1426.66
```

```
            },
            "timestamp":{
               "timeInSeconds":1580853000,
               "offsetInNanos":0
            },
            "quality":"GOOD"
         }
      },
      {
         "entryId":"2",
         "propertyValue":{
            "value":{
               "doubleValue":1429.44
            },
            "timestamp":{
               "timeInSeconds":1580853000,
               "offsetInNanos":0
            },
            "quality":"GOOD"
         }
      }
   ]
}
```

See Also

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

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

BatchGetAssetPropertyValueHistory

Gets the historical values for one or more asset properties. For more information, see Querying historical values in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
POST /properties/batch/history HTTP/1.1
Content-type: application/json

{
   "entries": [
      {
         "assetId": "string",
         "endDate": number,
         "entryId": "string",
         "propertyAlias": "string",
         "propertyId": "string",
         "qualities": [ "string" ],
         "startDate": number,
         "timeOrdering": "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.

entries

The list of asset property historical value entries for the batch get request. You can specify up to 16 entries per request.

Type: Array of BatchGetAssetPropertyValueHistoryEntry objects

Required: Yes

maxResults

The maximum number of results to return for each paginated request. A result set is returned in the two cases, whichever occurs first.

- The size of the result set is equal to 4 MB.
- The number of data points in the result set is equal to the value of `maxResults`. The maximum value of `maxResults` is 20000.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

nextToken

The token to be used for the next set of paginated results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Required: No

Response Syntax

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

{
   "errorEntries": [
      {
         "entryId": "string",
         "errorCode": "string",
         "errorMessage": "string"
      }
   ],
   "nextToken": "string",
   "skippedEntries": [
      {
```

```
            "completionStatus": "string",
            "entryId": "string",
            "errorInfo": {
               "errorCode": "string",
               "errorTimestamp": number
            }
         }
      ],
      "successEntries": [
         {
            "assetPropertyValueHistory": [
               {
                  "quality": "string",
                  "timestamp": {
                     "offsetInNanos": number,
                     "timeInSeconds": number
                  },
                  "value": {
                     "booleanValue": boolean,
                     "doubleValue": number,
                     "integerValue": number,
                     "nullValue": {
                        "valueType": "string"
                     },
                     "stringValue": "string"
                  }
               }
            ],
            "entryId": "string"
         }
      ]
}
```

Response Elements

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

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

errorEntries

A list of the errors (if any) associated with the batch request. Each error entry contains the `entryId` of the entry that failed.

Type: Array of BatchGetAssetPropertyValueHistoryErrorEntry objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

skippedEntries

A list of entries that were not processed by this batch request. because these entries had been completely processed by previous paginated requests. Each skipped entry contains the `entryId` of the entry that skipped.

Type: Array of BatchGetAssetPropertyValueHistorySkippedEntry objects

successEntries

A list of entries that were processed successfully by this batch request. Each success entry contains the `entryId` of the entry that succeeded and the latest query result.

Type: Array of BatchGetAssetPropertyValueHistorySuccessEntry objects

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ServiceUnavailableException

The requested service is unavailable.

HTTP Status Code: 503

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

Examples

Example

The following example uses the AWS Command Line Interface (AWS CLI) to retrieve the historical temperature values for two wind turbines between April 26, 2021 at midnight and May 3, 2021 at midnight in Pacific Time (PT). The following also shows the contents of the `batch-get-asset-property-value-history.json` file.

Sample Request

```
aws iotsitewise batch-get-asset-property-value-history --cli-input-json file://batch-
get-asset-property-value-history.json
```

```
{
   "entries":[
      {
         "entryId":"1",
         "assetId":"a1b2c3d4-5678-90ab-cdef-11111EXAMPLE",
         "propertyId":"a1b2c3d4-5678-90ab-cdef-22222EXAMPLE",
         "startDate":1619420400,
         "endDate":1620025200
      },
      {
         "entryId":"2",
```

```
            "assetId":"a1b2c3d4-5678-90ab-cdef-33333EXAMPLE",
            "propertyId":"a1b2c3d4-5678-90ab-cdef-44444EXAMPLE",
            "startDate":1619420400,
            "endDate":1620025200
         }
      ]
}
```

Sample Response

```
{
   "errorEntries":[],
   "successEntries":[
      {
         "entryId":"1",
         "assetPropertyValueHistory":[
            {
               "value":{
                  "doubleValue":1426.55
               },
               "timestamp":{
                  "timeInSeconds":1619420400,
                  "offsetInNanos":0
               },
               "quality":"GOOD"
            },
            {
               "value":{
                  "doubleValue":1429.23
               },
               "timestamp":{
                  "timeInSeconds":1619620700,
                  "offsetInNanos":0
               },
               "quality":"GOOD"
            },
            {
               "value":{
                  "doubleValue":1431.43
               },
               "timestamp":{
                  "timeInSeconds":1619820400,
                  "offsetInNanos":0
```

```
                },
                "quality":"GOOD"
            },
            {
                "value":{
                    "doubleValue":1435.66
                },
                "timestamp":{
                    "timeInSeconds":1620025200,
                    "offsetInNanos":0
                },
                "quality":"GOOD"
            }
        ]
    },
    {
        "entryId":"2",
        "assetPropertyValueHistory":[
            {
                "value":{
                    "doubleValue":1424.17
                },
                "timestamp":{
                    "timeInSeconds":1619420400,
                    "offsetInNanos":0
                },
                "quality":"GOOD"
            },
            {
                "value":{
                    "doubleValue":1424.23
                },
                "timestamp":{
                    "timeInSeconds":1619620700,
                    "offsetInNanos":0
                },
                "quality":"GOOD"
            },
            {
                "value":{
                    "doubleValue":1425.24
                },
                "timestamp":{
                    "timeInSeconds":1619820400,
```

```
                "offsetInNanos":0
            },
            "quality":"GOOD"
        },
        {
            "value":{
                "doubleValue":1430.17
            },
            "timestamp":{
                "timeInSeconds":1620025200,
                "offsetInNanos":0
            },
            "quality":"GOOD"
        }
    ]
  }
],
"skippedEntries":[]
}
```

See Also

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

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

BatchPutAssetPropertyValue

Sends a list of asset property values to AWS IoT SiteWise. Each value is a timestamp-quality-value (TQV) data point. For more information, see Ingesting data using the API in the *AWS IoT SiteWise User Guide*.

To identify an asset property, you must specify one of the following:

- The `assetId` and `propertyId` of an asset property.
- A `propertyAlias`, which is a data stream alias (for example, `/company/windfarm/3/turbine/7/temperature`). To define an asset property's alias, see UpdateAssetProperty.

> **Important**
>
> With respect to Unix epoch time, AWS IoT SiteWise accepts only TQVs that have a timestamp of no more than 7 days in the past and no more than 10 minutes in the future. AWS IoT SiteWise rejects timestamps outside of the inclusive range of [-7 days, +10 minutes] and returns a `TimestampOutOfRangeException` error.
> For each asset property, AWS IoT SiteWise overwrites TQVs with duplicate timestamps unless the newer TQV has a different quality. For example, if you store a TQV `{T1, GOOD, V1}`, then storing `{T1, GOOD, V2}` replaces the existing TQV.

AWS IoT SiteWise authorizes access to each `BatchPutAssetPropertyValue` entry individually. For more information, see BatchPutAssetPropertyValue authorization in the *AWS IoT SiteWise User Guide*.

Request Syntax

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

{
   "enablePartialEntryProcessing": boolean,
   "entries": [
      {
         "assetId": "string",
         "entryId": "string",
```

```
            "propertyAlias": "string",
            "propertyId": "string",
            "propertyValues": [
               {
                  "quality": "string",
                  "timestamp": {
                     "offsetInNanos": number,
                     "timeInSeconds": number
                  },
                  "value": {
                     "booleanValue": boolean,
                     "doubleValue": number,
                     "integerValue": number,
                     "nullValue": {
                        "valueType": "string"
                     },
                     "stringValue": "string"
                  }
               }
            ]
         }
      ]
   }
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

enablePartialEntryProcessing

This setting enables partial ingestion at entry-level. If set to `true`, we ingest all TQVs not resulting in an error. If set to `false`, an invalid TQV fails ingestion of the entire entry that contains it.

Type: Boolean

Required: No

entries

The list of asset property value entries for the batch put request. You can specify up to 10 entries per request.

Type: Array of PutAssetPropertyValueEntry objects

Required: Yes

Response Syntax

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

{
   "errorEntries": [
      {
         "entryId": "string",
         "errors": [
            {
               "errorCode": "string",
               "errorMessage": "string",
               "timestamps": [
                  {
                     "offsetInNanos": number,
                     "timeInSeconds": 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.

errorEntries

A list of the errors (if any) associated with the batch put request. Each error entry contains the `entryId` of the entry that failed.

Type: Array of BatchPutAssetPropertyErrorEntry objects

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ServiceUnavailableException

The requested service is unavailable.

HTTP Status Code: 503

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

CreateAccessPolicy

Creates an access policy that grants the specified identity (IAM Identity Center user, IAM Identity Center group, or IAM user) access to the specified AWS IoT SiteWise Monitor portal or project resource.

> **Note**
>
> Support for access policies that use an SSO Group as the identity is not supported at this time.

Request Syntax

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

{
   "accessPolicyIdentity": {
      "group": {
         "id": "string"
      },
      "iamRole": {
         "arn": "string"
      },
      "iamUser": {
         "arn": "string"
      },
      "user": {
         "id": "string"
      }
   },
   "accessPolicyPermission": "string",
   "accessPolicyResource": {
      "portal": {
         "id": "string"
      },
      "project": {
         "id": "string"
      }
   },
```

```
    "clientToken": "string",
    "tags": {
       "string" : "string"
    }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

accessPolicyIdentity

The identity for this access policy. Choose an IAM Identity Center user, an IAM Identity Center group, or an IAM user.

Type: Identity object

Required: Yes

accessPolicyPermission

The permission level for this access policy. Note that a project `ADMINISTRATOR` is also known as a project owner.

Type: String

Valid Values: `ADMINISTRATOR | VIEWER`

Required: Yes

accessPolicyResource

The AWS IoT SiteWise Monitor resource for this access policy. Choose either a portal or a project.

Type: Resource object

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

tags

A list of key-value pairs that contain metadata for the access policy. For more information, see Tagging your AWS IoT SiteWise resources in the *AWS IoT SiteWise User Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

Required: No

Response Syntax

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

{
   "accessPolicyArn": "string",
   "accessPolicyId": "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.

accessPolicyArn

The ARN of the access policy, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:access-policy/${AccessPolicyId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

accessPolicyId

The ID of the access policy.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python

- AWS SDK for Ruby V3

CreateAsset

Creates an asset from an existing asset model. For more information, see Creating assets in the *AWS IoT SiteWise User Guide*.

Request Syntax

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

{
   "assetDescription": "string",
   "assetExternalId": "string",
   "assetId": "string",
   "assetModelId": "string",
   "assetName": "string",
   "clientToken": "string",
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

assetDescription

A description for the asset.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

assetExternalId

An external ID to assign to the asset. The external ID must be unique within your AWS account. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

assetId

The ID to assign to the asset, if desired. AWS IoT SiteWise automatically generates a unique ID for you, so this parameter is never required. However, if you prefer to supply your own ID instead, you can specify it here in UUID format. If you specify your own ID, it must be globally unique.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

assetModelId

The ID of the asset model from which to create the asset. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

assetName

A friendly name for the asset.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

tags

A list of key-value pairs that contain metadata for the asset. For more information, see Tagging your AWS IoT SiteWise resources in the *AWS IoT SiteWise User Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

Required: No

Response Syntax

```
HTTP/1.1 202
```

```
Content-type: application/json

{
   "assetArn": "string",
   "assetId": "string",
   "assetStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "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.

assetArn

The ARN of the asset, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:asset/${AssetId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

assetId

The ID of the asset, in UUID format. This ID uniquely identifies the asset within AWS IoT SiteWise and can be used with other AWS IoT SiteWise API operations.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetStatus

The status of the asset, which contains a state (`CREATING` after successfully calling this operation) and any error message.

Type: AssetStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

CreateAssetModel

Creates an asset model from specified property and hierarchy definitions. You create assets from asset models. With asset models, you can easily create assets of the same type that have standardized definitions. Each asset created from a model inherits the asset model's property and hierarchy definitions. For more information, see Defining asset models in the *AWS IoT SiteWise User Guide*.

You can create three types of asset models, `ASSET_MODEL`, `COMPONENT_MODEL`, or an `INTERFACE`.

- **ASSET_MODEL** – (default) An asset model that you can use to create assets. Can't be included as a component in another asset model.
- **COMPONENT_MODEL** – A reusable component that you can include in the composite models of other asset models. You can't create assets directly from this type of asset model.
- **INTERFACE** – An interface is a type of model that defines a standard structure that can be applied to different asset models.

Request Syntax

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

{
   "assetModelCompositeModels": [
      {
         "description": "string",
         "externalId": "string",
         "id": "string",
         "name": "string",
         "properties": [
            {
               "dataType": "string",
               "dataTypeSpec": "string",
               "externalId": "string",
               "id": "string",
               "name": "string",
               "type": {
                  "attribute": {
                     "defaultValue": "string"
                  },
```

```
                "measurement": {
                   "processingConfig": {
                      "forwardingConfig": {
                         "state": "string"
                      }
                   }
                },
                "metric": {
                   "expression": "string",
                   "processingConfig": {
                      "computeLocation": "string"
                   },
                   "variables": [
                      {
                         "name": "string",
                         "value": {
                            "hierarchyId": "string",
                            "propertyId": "string",
                            "propertyPath": [
                               {
                                  "id": "string",
                                  "name": "string"
                               }
                            ]
                         }
                      }
                   ],
                   "window": {
                      "tumbling": {
                         "interval": "string",
                         "offset": "string"
                      }
                   }
                },
                "transform": {
                   "expression": "string",
                   "processingConfig": {
                      "computeLocation": "string",
                      "forwardingConfig": {
                         "state": "string"
                      }
                   },
                   "variables": [
                      {
```

```
                                "name": "string",
                                "value": {
                                   "hierarchyId": "string",
                                   "propertyId": "string",
                                   "propertyPath": [
                                      {
                                         "id": "string",
                                         "name": "string"
                                      }
                                   ]
                                }
                             }
                          ]
                       }
                    },
                    "unit": "string"
                 }
              ],
              "type": "string"
           }
        ],
        "assetModelDescription": "string",
        "assetModelExternalId": "string",
        "assetModelHierarchies": [
           {
              "childAssetModelId": "string",
              "externalId": "string",
              "id": "string",
              "name": "string"
           }
        ],
        "assetModelId": "string",
        "assetModelName": "string",
        "assetModelProperties": [
           {
              "dataType": "string",
              "dataTypeSpec": "string",
              "externalId": "string",
              "id": "string",
              "name": "string",
              "type": {
                 "attribute": {
                    "defaultValue": "string"
                 },
```

```
            "measurement": {
               "processingConfig": {
                  "forwardingConfig": {
                     "state": "string"
                  }
               }
            },
            "metric": {
               "expression": "string",
               "processingConfig": {
                  "computeLocation": "string"
               },
               "variables": [
                  {
                     "name": "string",
                     "value": {
                        "hierarchyId": "string",
                        "propertyId": "string",
                        "propertyPath": [
                           {
                              "id": "string",
                              "name": "string"
                           }
                        ]
                     }
                  }
               ],
               "window": {
                  "tumbling": {
                     "interval": "string",
                     "offset": "string"
                  }
               }
            },
            "transform": {
               "expression": "string",
               "processingConfig": {
                  "computeLocation": "string",
                  "forwardingConfig": {
                     "state": "string"
                  }
               },
               "variables": [
                  {
```

```
                        "name": "string",
                        "value": {
                           "hierarchyId": "string",
                           "propertyId": "string",
                           "propertyPath": [
                              {
                                 "id": "string",
                                 "name": "string"
                              }
                           ]
                        }
                     }
                  ]
               }
            },
            "unit": "string"
         }
      ],
      "assetModelType": "string",
      "clientToken": "string",
      "tags": {
         "string" : "string"
      }
   }
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

assetModelCompositeModels

The composite models that are part of this asset model. It groups properties (such as attributes, measurements, transforms, and metrics) and child composite models that model parts of your industrial equipment. Each composite model has a type that defines the properties that the composite model supports. Use composite models to define alarms on this asset model.

> **Note**
>
> When creating custom composite models, you need to use CreateAssetModelCompositeModel. For more information, see Creating custom composite models (Components) in the *AWS IoT SiteWise User Guide*.

Type: Array of AssetModelCompositeModelDefinition objects

Required: No

assetModelDescription

A description for the asset model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

assetModelExternalId

An external ID to assign to the asset model. The external ID must be unique within your AWS account. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

assetModelHierarchies

The hierarchy definitions of the asset model. Each hierarchy specifies an asset model whose assets can be children of any other assets created from this asset model. For more information, see Asset hierarchies in the *AWS IoT SiteWise User Guide*.

You can specify up to 10 hierarchies per asset model. For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: Array of AssetModelHierarchyDefinition objects

Required: No

assetModelId

The ID to assign to the asset model, if desired. AWS IoT SiteWise automatically generates a unique ID for you, so this parameter is never required. However, if you prefer to supply your own ID instead, you can specify it here in UUID format. If you specify your own ID, it must be globally unique.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

assetModelName

A unique name for the asset model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

assetModelProperties

The property definitions of the asset model. For more information, see Asset properties in the *AWS IoT SiteWise User Guide*.

You can specify up to 200 properties per asset model. For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: Array of AssetModelPropertyDefinition objects

Required: No

assetModelType

The type of asset model.

- **ASSET_MODEL** – (default) An asset model that you can use to create assets. Can't be included as a component in another asset model.
- **COMPONENT_MODEL** – A reusable component that you can include in the composite models of other asset models. You can't create assets directly from this type of asset model.

Type: String

Valid Values: `ASSET_MODEL | COMPONENT_MODEL | INTERFACE`

Required: No

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

tags

A list of key-value pairs that contain metadata for the asset model. For more information, see Tagging your AWS IoT SiteWise resources in the *AWS IoT SiteWise User Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

Required: No

Response Syntax

```
HTTP/1.1 202
```

```
Content-type: application/json

{
   "assetModelArn": "string",
   "assetModelId": "string",
   "assetModelStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "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.

assetModelArn

The ARN of the asset model, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:asset-model/${AssetModelId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

assetModelId

The ID of the asset model, in UUID format. You can use this ID when you call other AWS IoT SiteWise API operations.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetModelStatus

The status of the asset model, which contains a state (`CREATING` after successfully calling this operation) and any error message.

Type: AssetModelStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python

- AWS SDK for Ruby V3

CreateAssetModelCompositeModel

Creates a custom composite model from specified property and hierarchy definitions. There are two types of custom composite models, `inline` and `component-model-based`.

Use component-model-based custom composite models to define standard, reusable components. A component-model-based custom composite model consists of a name, a description, and the ID of the component model it references. A component-model-based custom composite model has no properties of its own; its referenced component model provides its associated properties to any created assets. For more information, see Custom composite models (Components) in the *AWS IoT SiteWise User Guide*.

Use inline custom composite models to organize the properties of an asset model. The properties of inline custom composite models are local to the asset model where they are included and can't be used to create multiple assets.

To create a component-model-based model, specify the `composedAssetModelId` of an existing asset model with `assetModelType` of `COMPONENT_MODEL`.

To create an inline model, specify the `assetModelCompositeModelProperties` and don't include an `composedAssetModelId`.

Request Syntax

```
POST /asset-models/assetModelId/composite-models HTTP/1.1
If-Match: ifMatch
If-None-Match: ifNoneMatch
Match-For-Version-Type: matchForVersionType
Content-type: application/json

{
   "assetModelCompositeModelDescription": "string",
   "assetModelCompositeModelExternalId": "string",
   "assetModelCompositeModelId": "string",
   "assetModelCompositeModelName": "string",
   "assetModelCompositeModelProperties": [
      {
         "dataType": "string",
         "dataTypeSpec": "string",
         "externalId": "string",
         "id": "string",
```

```
            "name": "string",
            "type": {
               "attribute": {
                  "defaultValue": "string"
               },
               "measurement": {
                  "processingConfig": {
                     "forwardingConfig": {
                        "state": "string"
                     }
                  }
               },
               "metric": {
                  "expression": "string",
                  "processingConfig": {
                     "computeLocation": "string"
                  },
                  "variables": [
                     {
                        "name": "string",
                        "value": {
                           "hierarchyId": "string",
                           "propertyId": "string",
                           "propertyPath": [
                              {
                                 "id": "string",
                                 "name": "string"
                              }
                           ]
                        }
                     }
                  ],
                  "window": {
                     "tumbling": {
                        "interval": "string",
                        "offset": "string"
                     }
                  }
               },
               "transform": {
                  "expression": "string",
                  "processingConfig": {
                     "computeLocation": "string",
                     "forwardingConfig": {
```

```
                    "state": "string"
                }
            },
            "variables": [
                {
                    "name": "string",
                    "value": {
                        "hierarchyId": "string",
                        "propertyId": "string",
                        "propertyPath": [
                            {
                                "id": "string",
                                "name": "string"
                            }
                        ]
                    }
                }
            ]
        }
    },
    "unit": "string"
  }
],
"assetModelCompositeModelType": "string",
"clientToken": "string",
"composedAssetModelId": "string",
"parentAssetModelCompositeModelId": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

assetModelId

The ID of the asset model this composite model is a part of.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

ifMatch

The expected current entity tag (ETag) for the asset model's latest or active version (specified using `matchForVersionType`). The create request is rejected if the tag does not match the latest or active version's current entity tag. See Optimistic locking for asset model writes in the *AWS IoT SiteWise User Guide*.

Pattern: `^[\w-]{43}$`

ifNoneMatch

Accepts * to reject the create request if an active version (specified using `matchForVersionType` as `ACTIVE`) already exists for the asset model.

Pattern: `\*`

matchForVersionType

Specifies the asset model version type (`LATEST` or `ACTIVE`) used in conjunction with `If-Match` or `If-None-Match` headers to determine the target ETag for the create operation.

Valid Values: `LATEST | ACTIVE`

Request Body

The request accepts the following data in JSON format.

assetModelCompositeModelDescription

A description for the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

assetModelCompositeModelExternalId

An external ID to assign to the composite model.

If the composite model is a derived composite model, or one nested inside a component model, you can only set the external ID using `UpdateAssetModelCompositeModel` and specifying the derived ID of the model or property from the created model it's a part of.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

assetModelCompositeModelId

The ID of the composite model. AWS IoT SiteWise automatically generates a unique ID for you, so this parameter is never required. However, if you prefer to supply your own ID instead, you can specify it here in UUID format. If you specify your own ID, it must be globally unique.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

assetModelCompositeModelName

A unique name for the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

assetModelCompositeModelProperties

The property definitions of the composite model. For more information, see Inline custom composite models in the *AWS IoT SiteWise User Guide*.

You can specify up to 200 properties per composite model. For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: Array of AssetModelPropertyDefinition objects

Required: No

assetModelCompositeModelType

The composite model type. Valid values are `AWS/ALARM`, `CUSTOM`, or `AWS/L4E_ANOMALY`.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

composedAssetModelId

The ID of a component model which is reused to create this composite model.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

parentAssetModelCompositeModelId

The ID of the parent composite model in this asset model relationship.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

Response Syntax

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

{
   "assetModelCompositeModelId": "string",
   "assetModelCompositeModelPath": [
      {
         "id": "string",
         "name": "string"
      }
   ],
   "assetModelStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "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.

assetModelCompositeModelId

The ID of the composed asset model. You can use this ID when you call other AWS IoT SiteWise APIs.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetModelCompositeModelPath

The path to the composite model listing the parent composite models.

Type: Array of AssetModelCompositeModelPathSegment objects

assetModelStatus

Contains current status information for an asset model. For more information, see Asset and model states in the *AWS IoT SiteWise User Guide*.

Type: AssetModelStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

PreconditionFailedException

The precondition in one or more of the request-header fields evaluated to `FALSE`.

HTTP Status Code: 412

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

CreateBulkImportJob

Defines a job to ingest data to AWS IoT SiteWise from Amazon S3. For more information, see Create a bulk import job (AWS CLI) in the *Amazon Simple Storage Service User Guide*.

> **Important**
>
> Before you create a bulk import job, you must enable AWS IoT SiteWise warm tier or AWS IoT SiteWise cold tier. For more information about how to configure storage settings, see PutStorageConfiguration.
>
> Bulk import is designed to store historical data to AWS IoT SiteWise.
>
> - Newly ingested data in the hot tier triggers notifications and computations.
> - After data moves from the hot tier to the warm or cold tier based on retention settings, it does not trigger computations or notifications.
> - Data older than 7 days does not trigger computations or notifications.

Request Syntax

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

{
   "adaptiveIngestion": boolean,
   "deleteFilesAfterImport": boolean,
   "errorReportLocation": {
      "bucket": "string",
      "prefix": "string"
   },
   "files": [
      {
         "bucket": "string",
         "key": "string",
         "versionId": "string"
      }
   ],
   "jobConfiguration": {
      "fileFormat": {
         "csv": {
```

```
            "columnNames": [ "string" ]
         },
         "parquet": {
         }
      }
   },
   "jobName": "string",
   "jobRoleArn": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

adaptiveIngestion

If set to true, ingest new data into AWS IoT SiteWise storage. Measurements with notifications, metrics and transforms are computed. If set to false, historical data is ingested into AWS IoT SiteWise as is.

Type: Boolean

Required: No

deleteFilesAfterImport

If set to true, your data files is deleted from S3, after ingestion into AWS IoT SiteWise storage.

Type: Boolean

Required: No

errorReportLocation

The Amazon S3 destination where errors associated with the job creation request are saved.

Type: ErrorReportLocation object

Required: Yes

files

The files in the specified Amazon S3 bucket that contain your data.

Type: Array of File objects

Required: Yes

jobConfiguration

Contains the configuration information of a job, such as the file format used to save data in Amazon S3.

Type: JobConfiguration object

Required: Yes

jobName

The unique name that helps identify the job request.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

jobRoleArn

The ARN of the IAM role that allows AWS IoT SiteWise to read Amazon S3 data.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

Response Syntax

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

```
{
   "jobId": "string",
   "jobName": "string",
   "jobStatus": "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.

jobId

The ID of the job.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

jobName

The unique name that helps identify the job request.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

jobStatus

The status of the bulk import job can be one of following values:

- `PENDING` – AWS IoT SiteWise is waiting for the current bulk import job to finish.
- `CANCELLED` – The bulk import job has been canceled.
- `RUNNING` – AWS IoT SiteWise is processing your request to import your data from Amazon S3.
- `COMPLETED` – AWS IoT SiteWise successfully completed your request to import data from Amazon S3.

- `FAILED` – AWS IoT SiteWise couldn't process your request to import data from Amazon S3. You can use logs saved in the specified error report location in Amazon S3 to troubleshoot issues.
- `COMPLETED_WITH_FAILURES` – AWS IoT SiteWise completed your request to import data from Amazon S3 with errors. You can use logs saved in the specified error report location in Amazon S3 to troubleshoot issues.

Type: String

Valid Values: `PENDING | CANCELLED | RUNNING | COMPLETED | FAILED | COMPLETED_WITH_FAILURES`

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

CreateComputationModel

Create a computation model with a configuration and data binding.

Request Syntax

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

{
   "clientToken": "string",
   "computationModelConfiguration": {
      "anomalyDetection": {
         "inputProperties": "string",
         "resultProperty": "string"
      }
   },
   "computationModelDataBinding": {
      "string" : {
         "assetModelProperty": {
            "assetModelId": "string",
            "propertyId": "string"
         },
         "assetProperty": {
            "assetId": "string",
            "propertyId": "string"
         },
         "list": [
            "ComputationModelDataBindingValue"
         ]
      }
   },
   "computationModelDescription": "string",
   "computationModelName": "string",
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

computationModelConfiguration

The configuration for the computation model.

Type: ComputationModelConfiguration object

Required: Yes

computationModelDataBinding

The data binding for the computation model. Key is a variable name defined in configuration. Value is a `ComputationModelDataBindingValue` referenced by the variable.

Type: String to ComputationModelDataBindingValue object map

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

Key Pattern: `^[a-z][a-z0-9_]*$`

Required: Yes

computationModelDescription

The description of the computation model.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: No

computationModelName

The name of the computation model.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: Yes

tags

A list of key-value pairs that contain metadata for the asset. For more information, see Tagging your AWS IoT SiteWise resources in the *AWS IoT SiteWise User Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

Required: No

Response Syntax

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

{
   "computationModelArn": "string",
   "computationModelId": "string",
   "computationModelStatus": {
      "error": {
         "code": "string",
         "details": [
            {
```

```
                "code": "string",
                "message": "string"
            }
        ],
        "message": "string"
    },
    "state": "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.

computationModelArn

The ARN of the computation model, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:computation-model/${ComputationModelId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

computationModelId

The ID of the computation model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

computationModelStatus

The status of the computation model, containing a state (CREATING after successfully calling this operation) and any error messages.

Type: ComputationModelStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

CreateDashboard

Creates a dashboard in an AWS IoT SiteWise Monitor project.

Request Syntax

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

{
   "clientToken": "string",
   "dashboardDefinition": "string",
   "dashboardDescription": "string",
   "dashboardName": "string",
   "projectId": "string",
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

dashboardDefinition

The dashboard definition specified in a JSON literal.

- AWS IoT SiteWise Monitor (Classic) see Create dashboards (AWS CLI)
- AWS IoT SiteWise Monitor (AI-aware) see Create dashboards (AWS CLI)

in the *AWS IoT SiteWise User Guide*

Type: String

Length Constraints: Minimum length of 0. Maximum length of 204800.

Pattern: `.+`

Required: Yes

dashboardDescription

A description for the dashboard.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

dashboardName

A friendly name for the dashboard.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

projectId

The ID of the project in which to create the dashboard.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

tags

A list of key-value pairs that contain metadata for the dashboard. For more information, see Tagging your AWS IoT SiteWise resources in the *AWS IoT SiteWise User Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

Required: No

Response Syntax

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

{
   "dashboardArn": "string",
   "dashboardId": "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.

dashboardArn

The ARN of the dashboard, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:dashboard/${DashboardId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

dashboardId

The ID of the dashboard.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

CreateDataset

Creates a dataset to connect an external datasource.

Request Syntax

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

{
   "clientToken": "string",
   "datasetDescription": "string",
   "datasetId": "string",
   "datasetName": "string",
   "datasetSource": {
      "sourceDetail": {
         "kendra": {
            "knowledgeBaseArn": "string",
            "roleArn": "string"
         }
      },
      "sourceFormat": "string",
      "sourceType": "string"
   },
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

datasetDescription

A description about the dataset, and its functionality.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: No

datasetId

The ID of the dataset.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

datasetName

The name of the dataset.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: Yes

datasetSource

The data source for the dataset.

Type: DatasetSource object

Required: Yes

tags

A list of key-value pairs that contain metadata for the access policy. For more information, see Tagging your AWS IoT SiteWise resources in the *AWS IoT SiteWise User Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

Required: No

Response Syntax

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

{
   "datasetArn": "string",
   "datasetId": "string",
   "datasetStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "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.

datasetArn

The ARN of the dataset. The format is `arn:${Partition}:iotsitewise:${Region}:${Account}:dataset/${DatasetId}`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

datasetId

The ID of the dataset.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

datasetStatus

The status of the dataset. This contains the state and any error messages. State is `CREATING` after a successfull call to this API, and any associated error message. The state is `ACTIVE` when ready to use.

Type: DatasetStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

CreateGateway

Creates a gateway, which is a virtual or edge device that delivers industrial data streams from local servers to AWS IoT SiteWise. For more information, see Ingesting data using a gateway in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
POST /20200301/gateways HTTP/1.1
Content-type: application/json

{
   "gatewayName": "string",
   "gatewayPlatform": {
      "greengrass": {
         "groupArn": "string"
      },
      "greengrassV2": {
         "coreDeviceOperatingSystem": "string",
         "coreDeviceThingName": "string"
      },
      "siemensIE": {
         "iotCoreThingName": "string"
      }
   },
   "gatewayVersion": "string",
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

gatewayName

A unique name for the gateway.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

gatewayPlatform

The gateway's platform. You can only specify one platform in a gateway.

Type: GatewayPlatform object

Required: Yes

gatewayVersion

The version of the gateway to create. Specify 3 to create an MQTT-enabled, V3 gateway and 2 to create a Classic streams, V2 gateway. If not specified, the default is 2 (Classic streams, V2 gateway).

> **Note**
>
> When creating a V3 gateway (`gatewayVersion=3`) with the `GreengrassV2` platform, you must also specify the `coreDeviceOperatingSystem` parameter.

We recommend creating an MQTT-enabled gateway for self-hosted gateways and Siemens Industrial Edge gateways. For more information on gateway versions, see Use AWS IoT SiteWise Edge Edge gateways.

Type: String

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

Pattern: `^[0-9]+$`

Required: No

tags

A list of key-value pairs that contain metadata for the gateway. For more information, see Tagging your AWS IoT SiteWise resources in the *AWS IoT SiteWise User Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

Required: No

Response Syntax

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

{
   "gatewayArn": "string",
   "gatewayId": "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.

gatewayArn

The ARN of the gateway, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:gateway/${GatewayId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

gatewayId

The ID of the gateway device. You can use this ID when you call other AWS IoT SiteWise API operations.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

CreatePortal

Creates a portal, which can contain projects and dashboards. AWS IoT SiteWise Monitor uses IAM Identity Center or IAM to authenticate portal users and manage user permissions.

> **Note**
>
> Before you can sign in to a new portal, you must add at least one identity to that portal. For more information, see Adding or removing portal administrators in the *AWS IoT SiteWise User Guide*.

Request Syntax

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

{
   "alarms": {
      "alarmRoleArn": "string",
      "notificationLambdaArn": "string"
   },
   "clientToken": "string",
   "notificationSenderEmail": "string",
   "portalAuthMode": "string",
   "portalContactEmail": "string",
   "portalDescription": "string",
   "portalLogoImageFile": {
      "data": blob,
      "type": "string"
   },
   "portalName": "string",
   "portalType": "string",
   "portalTypeConfiguration": {
      "string" : {
         "portalTools": [ "string" ]
      }
   },
   "roleArn": "string",
   "tags": {
      "string" : "string"
```

```
    }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

alarms

Contains the configuration information of an alarm created in an AWS IoT SiteWise Monitor portal. You can use the alarm to monitor an asset property and get notified when the asset property value is outside a specified range. For more information, see Monitoring with alarms in the *AWS IoT SiteWise Application Guide*.

Type: Alarms object

Required: No

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

notificationSenderEmail

The email address that sends alarm notifications.

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[a-zA-Z0-9_\-\.\+]+@[a-zA-Z0-9_\-\.\+]+\.[a-zA-Z]{2,}$`

Required: No

portalAuthMode

The service to use to authenticate users to the portal. Choose from the following options:

- `SSO` – The portal uses AWS IAM Identity Center to authenticate users and manage user permissions. Before you can create a portal that uses IAM Identity Center, you must enable IAM Identity Center. For more information, see Enabling IAM Identity Center in the *AWS IoT SiteWise User Guide*. This option is only available in AWS Regions other than the China Regions.
- `IAM` – The portal uses AWS Identity and Access Management to authenticate users and manage user permissions.

You can't change this value after you create a portal.

Default: `SSO`

Type: String

Valid Values: `IAM | SSO`

Required: No

portalContactEmail

The AWS administrator's contact email address.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[a-zA-Z0-9_\-\.\+]+@[a-zA-Z0-9_\-\.\+]+\.[a-zA-Z]{2,}$`

Required: Yes

portalDescription

A description for the portal.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

portalLogoImageFile

A logo image to display in the portal. Upload a square, high-resolution image. The image is displayed on a dark background.

Type: ImageFile object

Required: No

portalName

A friendly name for the portal.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

portalType

Define the type of portal. The value for AWS IoT SiteWise Monitor (Classic) is `SITEWISE_PORTAL_V1`. The value for AWS IoT SiteWise Monitor (AI-aware) is `SITEWISE_PORTAL_V2`.

Type: String

Valid Values: `SITEWISE_PORTAL_V1 | SITEWISE_PORTAL_V2`

Required: No

portalTypeConfiguration

The configuration entry associated with the specific portal type. The value for AWS IoT SiteWise Monitor (Classic) is `SITEWISE_PORTAL_V1`. The value for AWS IoT SiteWise Monitor (AI-aware) is `SITEWISE_PORTAL_V2`.

Type: String to PortalTypeEntry object map

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

Required: No

roleArn

The ARN of a service role that allows the portal's users to access your AWS IoT SiteWise resources on your behalf. For more information, see Using service roles for AWS IoT SiteWise Monitor in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.\+=,@]+$`

Required: Yes

tags

A list of key-value pairs that contain metadata for the portal. For more information, see Tagging your AWS IoT SiteWise resources in the *AWS IoT SiteWise User Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

Required: No

Response Syntax

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

{
   "portalArn": "string",
   "portalId": "string",
   "portalStartUrl": "string",
```

```
    "portalStatus": {
       "error": {
          "code": "string",
          "message": "string"
       },
       "state": "string"
    },
    "ssoApplicationId": "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.

portalArn

The ARN of the portal, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:portal/${PortalId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

portalId

The ID of the created portal.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

portalStartUrl

The URL for the AWS IoT SiteWise Monitor portal. You can use this URL to access portals that use IAM Identity Center for authentication. For portals that use IAM for authentication, you must use the AWS IoT SiteWise console to get a URL that you can use to access the portal.

Type: String

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

Pattern: `^(http|https)\://\S+`

portalStatus

The status of the portal, which contains a state (`CREATING` after successfully calling this operation) and any error message.

Type: PortalStatus object

ssoApplicationId

The associated IAM Identity Center application ID, if the portal uses IAM Identity Center.

Type: String

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

Pattern: `^[!-~]*`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

CreateProject

Creates a project in the specified portal.

> **Note**
>
> Make sure that the project name and description don't contain confidential information.

Request Syntax

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

{
   "clientToken": "string",
   "portalId": "string",
   "projectDescription": "string",
   "projectName": "string",
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

portalId

The ID of the portal in which to create the project.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

projectDescription

A description for the project.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

projectName

A friendly name for the project.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

tags

A list of key-value pairs that contain metadata for the project. For more information, see Tagging your AWS IoT SiteWise resources in the *AWS IoT SiteWise User Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

Required: No

Response Syntax

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

{
   "projectArn": "string",
   "projectId": "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.

projectArn

The ARN of the project, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:project/${ProjectId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

projectId

The ID of the project.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DeleteAccessPolicy

Deletes an access policy that grants the specified identity access to the specified AWS IoT SiteWise Monitor resource. You can use this operation to revoke access to an AWS IoT SiteWise Monitor resource.

Request Syntax

```
DELETE /access-policies/accessPolicyId?clientToken=clientToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

accessPolicyId

The ID of the access policy to be deleted.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

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

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteAsset

Deletes an asset. This action can't be undone. For more information, see Deleting assets and models in the *AWS IoT SiteWise User Guide*.

> **Note**
>
> You can't delete an asset that's associated to another asset. For more information, see DisassociateAssets.

Request Syntax

```
DELETE /assets/assetId?clientToken=clientToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the asset to delete. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "assetStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "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.

assetStatus

The status of the asset, which contains a state (`DELETING` after successfully calling this operation) and any error message.

Type: AssetStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteAssetModel

Deletes an asset model. This action can't be undone. You must delete all assets created from an asset model before you can delete the model. Also, you can't delete an asset model if a parent asset model exists that contains a property formula expression that depends on the asset model that you want to delete. For more information, see Deleting assets and models in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
DELETE /asset-models/assetModelId?clientToken=clientToken HTTP/1.1
If-Match: ifMatch
If-None-Match: ifNoneMatch
Match-For-Version-Type: matchForVersionType
```

URI Request Parameters

The request uses the following URI parameters.

assetModelId

The ID of the asset model to delete. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

ifMatch

The expected current entity tag (ETag) for the asset model's latest or active version (specified using `matchForVersionType`). The delete request is rejected if the tag does not match the latest or active version's current entity tag. See Optimistic locking for asset model writes in the *AWS IoT SiteWise User Guide*.

Pattern: `^[\w-]{43}$`

ifNoneMatch

Accepts * to reject the delete request if an active version (specified using `matchForVersionType` as `ACTIVE`) already exists for the asset model.

Pattern: `\*`

matchForVersionType

Specifies the asset model version type (`LATEST` or `ACTIVE`) used in conjunction with `If-Match` or `If-None-Match` headers to determine the target ETag for the delete operation.

Valid Values: `LATEST | ACTIVE`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "assetModelStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
```

```
            "message": "string"
        },
        "state": "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.

assetModelStatus

The status of the asset model, which contains a state (`DELETING` after successfully calling this operation) and any error message.

Type: AssetModelStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

PreconditionFailedException

The precondition in one or more of the request-header fields evaluated to FALSE.

HTTP Status Code: 412

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DeleteAssetModelCompositeModel

Deletes a composite model. This action can't be undone. You must delete all assets created from a composite model before you can delete the model. Also, you can't delete a composite model if a parent asset model exists that contains a property formula expression that depends on the asset model that you want to delete. For more information, see Deleting assets and models in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
DELETE /asset-models/assetModelId/composite-models/assetModelCompositeModelId?
clientToken=clientToken HTTP/1.1
If-Match: ifMatch
If-None-Match: ifNoneMatch
Match-For-Version-Type: matchForVersionType
```

URI Request Parameters

The request uses the following URI parameters.

assetModelCompositeModelId

The ID of a composite model on this asset model.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

assetModelId

The ID of the asset model, in UUID format.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

ifMatch

The expected current entity tag (ETag) for the asset model's latest or active version (specified using `matchForVersionType`). The delete request is rejected if the tag does not match the latest or active version's current entity tag. See Optimistic locking for asset model writes in the *AWS IoT SiteWise User Guide*.

Pattern: `^[\w-]{43}$`

ifNoneMatch

Accepts * to reject the delete request if an active version (specified using `matchForVersionType` as `ACTIVE`) already exists for the asset model.

Pattern: `\*`

matchForVersionType

Specifies the asset model version type (`LATEST` or `ACTIVE`) used in conjunction with `If-Match` or `If-None-Match` headers to determine the target ETag for the delete operation.

Valid Values: `LATEST | ACTIVE`

Request Body

The request does not have a request body.

Response Syntax

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

{
```

```
    "assetModelStatus": {
       "error": {
          "code": "string",
          "details": [
             {
                "code": "string",
                "message": "string"
             }
          ],
          "message": "string"
       },
       "state": "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.

assetModelStatus

Contains current status information for an asset model. For more information, see Asset and model states in the *AWS IoT SiteWise User Guide*.

Type: AssetModelStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

PreconditionFailedException

The precondition in one or more of the request-header fields evaluated to FALSE.

HTTP Status Code: 412

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3

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

DeleteAssetModelInterfaceRelationship

Deletes an interface relationship between an asset model and an interface asset model.

Request Syntax

```
DELETE /asset-models/assetModelId/interface/interfaceAssetModelId/asset-model-
interface-relationship?clientToken=clientToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetModelId

The ID of the asset model. This can be either the actual ID in UUID format, or else externalId: followed by the external ID.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

interfaceAssetModelId

The ID of the interface asset model. This can be either the actual ID in UUID format, or else externalId: followed by the external ID.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "assetModelArn": "string",
   "assetModelId": "string",
   "assetModelStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "string"
   },
   "interfaceAssetModelId": "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.

assetModelArn

The ARN of the asset model, which has the following format. `arn:${Partition}:iotsitewise:${Region}:${Account}:asset-model/${AssetModelId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

assetModelId

The ID of the asset model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetModelStatus

Contains current status information for an asset model. For more information, see Asset and model states in the *AWS IoT SiteWise User Guide*.

Type: AssetModelStatus object

interfaceAssetModelId

The ID of the interface asset model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteComputationModel

Deletes a computation model. This action can't be undone.

Request Syntax

```
DELETE /computation-models/computationModelId?clientToken=clientToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

computationModelId

The ID of the computation model.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

```
{
   "computationModelStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "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.

computationModelStatus

The status of the computation model. It contains a state (DELETING after successfully calling this operation) and any error messages.

Type: ComputationModelStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DeleteDashboard

Deletes a dashboard from AWS IoT SiteWise Monitor.

Request Syntax

```
DELETE /dashboards/dashboardId?clientToken=clientToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

dashboardId

The ID of the dashboard to delete.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

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

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteDataset

Deletes a dataset. This cannot be undone.

Request Syntax

```
DELETE /datasets/datasetId?clientToken=clientToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

datasetId

The ID of the dataset.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

```
{
   "datasetStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "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.

datasetStatus

The status of the dataset. This contains the state and any error messages. State is `DELETING` after a successfull call to this API, and any associated error message.

Type: DatasetStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DeleteGateway

Deletes a gateway from AWS IoT SiteWise. When you delete a gateway, some of the gateway's files remain in your gateway's file system.

Request Syntax

```
DELETE /20200301/gateways/gatewayId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

gatewayId

The ID of the gateway to delete.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

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.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeletePortal

Deletes a portal from AWS IoT SiteWise Monitor.

Request Syntax

```
DELETE /portals/portalId?clientToken=clientToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

portalId

The ID of the portal to delete.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
```

```
    "portalStatus": {
       "error": {
          "code": "string",
          "message": "string"
       },
       "state": "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.

portalStatus

The status of the portal, which contains a state (`DELETING` after successfully calling this operation) and any error message.

Type: PortalStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DeleteProject

Deletes a project from AWS IoT SiteWise Monitor.

Request Syntax

```
DELETE /projects/projectId?clientToken=clientToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

projectId

The ID of the project.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

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

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteTimeSeries

Deletes a time series (data stream). If you delete a time series that's associated with an asset property, the asset property still exists, but the time series will no longer be associated with this asset property.

To identify a time series, do one of the following:

- If the time series isn't associated with an asset property, specify the `alias` of the time series.
- If the time series is associated with an asset property, specify one of the following:
  - The `alias` of the time series.
  - The `assetId` and `propertyId` that identifies the asset property.

Request Syntax

```
POST /timeseries/delete/?alias=alias&assetId=assetId&propertyId=propertyId HTTP/1.1
Content-type: application/json

{
   "clientToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

alias

The alias that identifies the time series.

Length Constraints: Minimum length of 1.

Pattern: `[^\u0000-\u001F\u007F]+`

assetId

The ID of the asset in which the asset property was created. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

propertyId

The ID of the asset property. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeAccessPolicy

Describes an access policy, which specifies an identity's access to an AWS IoT SiteWise Monitor portal or project.

Request Syntax

```
GET /access-policies/accessPolicyId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

accessPolicyId

The ID of the access policy.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "accessPolicyArn": "string",
   "accessPolicyCreationDate": number,
   "accessPolicyId": "string",
   "accessPolicyIdentity": {
      "group": {
         "id": "string"
      },
```

```
        "iamRole": {
           "arn": "string"
        },
        "iamUser": {
           "arn": "string"
        },
        "user": {
           "id": "string"
        }
    },
    "accessPolicyLastUpdateDate": number,
    "accessPolicyPermission": "string",
    "accessPolicyResource": {
        "portal": {
           "id": "string"
        },
        "project": {
           "id": "string"
        }
    }
}
```

Response Elements

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

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

accessPolicyArn

The ARN of the access policy, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:access-policy/${AccessPolicyId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

accessPolicyCreationDate

The date the access policy was created, in Unix epoch time.

Type: Timestamp

accessPolicyId

The ID of the access policy.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

accessPolicyIdentity

The identity (IAM Identity Center user, IAM Identity Center group, or IAM user) to which this access policy applies.

Type: Identity object

accessPolicyLastUpdateDate

The date the access policy was last updated, in Unix epoch time.

Type: Timestamp

accessPolicyPermission

The access policy permission. Note that a project `ADMINISTRATOR` is also known as a project owner.

Type: String

Valid Values: `ADMINISTRATOR | VIEWER`

accessPolicyResource

The AWS IoT SiteWise Monitor resource (portal or project) to which this access policy provides access.

Type: Resource object

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

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

DescribeAction

Retrieves information about an action.

Request Syntax

```
GET /actions/actionId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

actionId

The ID of the action.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "actionDefinitionId": "string",
   "actionId": "string",
   "actionPayload": {
      "stringValue": "string"
   },
   "executionTime": number,
   "resolveTo": {
```

```
        "assetId": "string"
    },
    "targetResource": {
        "assetId": "string",
        "computationModelId": "string"
    }
}
```

Response Elements

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

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

actionDefinitionId

The ID of the action definition.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

actionId

The ID of the action.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

actionPayload

The JSON payload of the action.

Type: ActionPayload object

executionTime

The time the action was executed.

Type: Timestamp

resolveTo

The detailed resource this action resolves to.

Type: ResolveTo object

targetResource

The resource the action will be taken on.

Type: TargetResource object

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeAsset

Retrieves information about an asset.

Request Syntax

```
GET /assets/assetId?excludeProperties=excludeProperties HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the asset. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

excludeProperties

Whether or not to exclude asset properties from the response.

Request Body

The request does not have a request body.

Response Syntax

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

{
   "assetArn": "string",
```

```
   "assetCompositeModels": [
      {
         "description": "string",
         "externalId": "string",
         "id": "string",
         "name": "string",
         "properties": [
            {
               "alias": "string",
               "dataType": "string",
               "dataTypeSpec": "string",
               "externalId": "string",
               "id": "string",
               "name": "string",
               "notification": {
                  "state": "string",
                  "topic": "string"
               },
               "path": [
                  {
                     "id": "string",
                     "name": "string"
                  }
               ],
               "unit": "string"
            }
         ],
         "type": "string"
      }
   ],
   "assetCompositeModelSummaries": [
      {
         "description": "string",
         "externalId": "string",
         "id": "string",
         "name": "string",
         "path": [
            {
               "id": "string",
               "name": "string"
            }
         ],
         "type": "string"
      }
```

```
    ],
    "assetCreationDate": number,
    "assetDescription": "string",
    "assetExternalId": "string",
    "assetHierarchies": [
       {
          "externalId": "string",
          "id": "string",
          "name": "string"
       }
    ],
    "assetId": "string",
    "assetLastUpdateDate": number,
    "assetModelId": "string",
    "assetName": "string",
    "assetProperties": [
       {
          "alias": "string",
          "dataType": "string",
          "dataTypeSpec": "string",
          "externalId": "string",
          "id": "string",
          "name": "string",
          "notification": {
             "state": "string",
             "topic": "string"
          },
          "path": [
             {
                "id": "string",
                "name": "string"
             }
          ],
          "unit": "string"
       }
    ],
    "assetStatus": {
       "error": {
          "code": "string",
          "details": [
             {
                "code": "string",
                "message": "string"
             }
```

```
            ],
            "message": "string"
        },
        "state": "string"
    }
}
```

Response Elements

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

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

assetArn

The ARN of the asset, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:asset/${AssetId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

assetCompositeModels

The composite models for the asset.

Type: Array of AssetCompositeModel objects

assetCompositeModelSummaries

The list of the immediate child custom composite model summaries for the asset.

Type: Array of AssetCompositeModelSummary objects

assetCreationDate

The date the asset was created, in Unix epoch time.

Type: Timestamp

assetDescription

A description for the asset.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

assetExternalId

The external ID of the asset, if any.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

assetHierarchies

A list of asset hierarchies that each contain a `hierarchyId`. A hierarchy specifies allowed parent/child asset relationships.

Type: Array of AssetHierarchy objects

assetId

The ID of the asset, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetLastUpdateDate

The date the asset was last updated, in Unix epoch time.

Type: Timestamp

assetModelId

The ID of the asset model that was used to create the asset.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetName

The name of the asset.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

assetProperties

The list of asset properties for the asset.

This object doesn't include properties that you define in composite models. You can find composite model properties in the `assetCompositeModels` object.

Type: Array of AssetProperty objects

assetStatus

The current status of the asset, which contains a state and any error message.

Type: AssetStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeAssetCompositeModel

Retrieves information about an asset composite model (also known as an asset component). An `AssetCompositeModel` is an instance of an `AssetModelCompositeModel`. If you want to see information about the model this is based on, call DescribeAssetModelCompositeModel.

Request Syntax

```
GET /assets/assetId/composite-models/assetCompositeModelId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetCompositeModelId

The ID of a composite model on this asset. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

assetId

The ID of the asset. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[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

{
   "actionDefinitions": [
      {
         "actionDefinitionId": "string",
         "actionName": "string",
         "actionType": "string"
      }
   ],
   "assetCompositeModelDescription": "string",
   "assetCompositeModelExternalId": "string",
   "assetCompositeModelId": "string",
   "assetCompositeModelName": "string",
   "assetCompositeModelPath": [
      {
         "id": "string",
         "name": "string"
      }
   ],
   "assetCompositeModelProperties": [
      {
         "alias": "string",
         "dataType": "string",
         "dataTypeSpec": "string",
         "externalId": "string",
         "id": "string",
         "name": "string",
         "notification": {
            "state": "string",
            "topic": "string"
         },
         "path": [
            {
               "id": "string",
               "name": "string"
```

```
            }
         ],
         "unit": "string"
      }
   ],
   "assetCompositeModelSummaries": [
      {
         "description": "string",
         "externalId": "string",
         "id": "string",
         "name": "string",
         "path": [
            {
               "id": "string",
               "name": "string"
            }
         ],
         "type": "string"
      }
   ],
   "assetCompositeModelType": "string",
   "assetId": "string"
}
```

Response Elements

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

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

actionDefinitions

The available actions for a composite model on this asset.

Type: Array of ActionDefinition objects

assetCompositeModelDescription

A description for the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

assetCompositeModelExternalId

An external ID to assign to the asset model.

If the composite model is a component-based composite model, or one nested inside a component model, you can only set the external ID using `UpdateAssetModelCompositeModel` and specifying the derived ID of the model or property from the created model it's a part of.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

assetCompositeModelId

The ID of a composite model on this asset.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetCompositeModelName

The unique, friendly name for the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

assetCompositeModelPath

The path to the composite model listing the parent composite models.

Type: Array of AssetCompositeModelPathSegment objects

assetCompositeModelProperties

The property definitions of the composite model that was used to create the asset.

Type: Array of AssetProperty objects

assetCompositeModelSummaries

The list of composite model summaries.

Type: Array of AssetCompositeModelSummary objects

assetCompositeModelType

The composite model type. Valid values are `AWS/ALARM`, `CUSTOM`, or `AWS/L4E_ANOMALY`.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

assetId

The ID of the asset, in UUID format. This ID uniquely identifies the asset within AWS IoT SiteWise and can be used with other AWS IoT SiteWise APIs.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeAssetModel

Retrieves information about an asset model. This includes details about the asset model's properties, hierarchies, composite models, and any interface relationships if the asset model implements interfaces.

Request Syntax

```
GET /asset-models/assetModelId?
assetModelVersion=assetModelVersion&excludeProperties=excludeProperties HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetModelId

The ID of the asset model. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

assetModelVersion

The version alias that specifies the latest or active version of the asset model. The details are returned in the response. The default value is `LATEST`. See Asset model versions in the *AWS IoT SiteWise User Guide*.

Pattern: `^(LATEST|ACTIVE)$`

excludeProperties

Whether or not to exclude asset model properties from the response.

Request Body

The request does not have a request body.

Response Syntax

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

{
   "assetModelArn": "string",
   "assetModelCompositeModels": [
      {
         "description": "string",
         "externalId": "string",
         "id": "string",
         "name": "string",
         "properties": [
            {
               "dataType": "string",
               "dataTypeSpec": "string",
               "externalId": "string",
               "id": "string",
               "name": "string",
               "path": [
                  {
                     "id": "string",
                     "name": "string"
                  }
               ],
               "type": {
                  "attribute": {
                     "defaultValue": "string"
                  },
                  "measurement": {
                     "processingConfig": {
                        "forwardingConfig": {
                           "state": "string"
                        }
                     }
                  },
                  "metric": {
```

```
                "expression": "string",
                "processingConfig": {
                   "computeLocation": "string"
                },
                "variables": [
                   {
                      "name": "string",
                      "value": {
                         "hierarchyId": "string",
                         "propertyId": "string",
                         "propertyPath": [
                            {
                               "id": "string",
                               "name": "string"
                            }
                         ]
                      }
                   }
                ],
                "window": {
                   "tumbling": {
                      "interval": "string",
                      "offset": "string"
                   }
                }
             },
             "transform": {
                "expression": "string",
                "processingConfig": {
                   "computeLocation": "string",
                   "forwardingConfig": {
                      "state": "string"
                   }
                },
                "variables": [
                   {
                      "name": "string",
                      "value": {
                         "hierarchyId": "string",
                         "propertyId": "string",
                         "propertyPath": [
                            {
                               "id": "string",
                               "name": "string"
```

```
                                    }
                                ]
                            }
                        }
                    ]
                }
            },
            "unit": "string"
        }
    ],
    "type": "string"
  }
],
"assetModelCompositeModelSummaries": [
  {
    "description": "string",
    "externalId": "string",
    "id": "string",
    "name": "string",
    "path": [
      {
        "id": "string",
        "name": "string"
      }
    ],
    "type": "string"
  }
],
"assetModelCreationDate": number,
"assetModelDescription": "string",
"assetModelExternalId": "string",
"assetModelHierarchies": [
  {
    "childAssetModelId": "string",
    "externalId": "string",
    "id": "string",
    "name": "string"
  }
],
"assetModelId": "string",
"assetModelLastUpdateDate": number,
"assetModelName": "string",
"assetModelProperties": [
  {
```

```
            "dataType": "string",
            "dataTypeSpec": "string",
            "externalId": "string",
            "id": "string",
            "name": "string",
            "path": [
               {
                  "id": "string",
                  "name": "string"
               }
            ],
            "type": {
               "attribute": {
                  "defaultValue": "string"
               },
               "measurement": {
                  "processingConfig": {
                     "forwardingConfig": {
                        "state": "string"
                     }
                  }
               },
               "metric": {
                  "expression": "string",
                  "processingConfig": {
                     "computeLocation": "string"
                  },
                  "variables": [
                     {
                        "name": "string",
                        "value": {
                           "hierarchyId": "string",
                           "propertyId": "string",
                           "propertyPath": [
                              {
                                 "id": "string",
                                 "name": "string"
                              }
                           ]
                        }
                     }
                  ],
                  "window": {
                     "tumbling": {
```

```
                    "interval": "string",
                    "offset": "string"
                }
            }
        },
        "transform": {
            "expression": "string",
            "processingConfig": {
                "computeLocation": "string",
                "forwardingConfig": {
                    "state": "string"
                }
            },
            "variables": [
                {
                    "name": "string",
                    "value": {
                        "hierarchyId": "string",
                        "propertyId": "string",
                        "propertyPath": [
                            {
                                "id": "string",
                                "name": "string"
                            }
                        ]
                    }
                }
            ]
        }
    },
    "unit": "string"
  }
],
"assetModelStatus": {
  "error": {
    "code": "string",
    "details": [
      {
        "code": "string",
        "message": "string"
      }
    ],
    "message": "string"
  },
```

```
        "state": "string"
    },
    "assetModelType": "string",
    "assetModelVersion": "string",
    "interfaceDetails": [
        {
            "id": "string"
        }
    ]
}
```

Response Elements

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

The response returns the following HTTP headers.

eTag

The entity tag (ETag) is a hash of the retrieved version of the asset model. It's used to make concurrent updates safely to the resource. See Optimistic locking for asset model writes in the *AWS IoT SiteWise User Guide*.

See Optimistic locking for asset model writes in the *AWS IoT SiteWise User Guide*.

Pattern: `^[\w-]{43}$`

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

assetModelArn

The ARN of the asset model, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:asset-model/${AssetModelId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

assetModelCompositeModels

The list of built-in composite models for the asset model, such as those with those of type `AWS/ALARMS`.

Type: Array of AssetModelCompositeModel objects

assetModelCompositeModelSummaries

The list of the immediate child custom composite model summaries for the asset model.

Type: Array of AssetModelCompositeModelSummary objects

assetModelCreationDate

The date the asset model was created, in Unix epoch time.

Type: Timestamp

assetModelDescription

The asset model's description.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

assetModelExternalId

The external ID of the asset model, if any.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

assetModelHierarchies

A list of asset model hierarchies that each contain a `childAssetModelId` and a `hierarchyId` (named `id`). A hierarchy specifies allowed parent/child asset relationships for an asset model.

Type: Array of AssetModelHierarchy objects

assetModelId

The ID of the asset model, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetModelLastUpdateDate

The date the asset model was last updated, in Unix epoch time.

Type: Timestamp

assetModelName

The name of the asset model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

assetModelProperties

The list of asset properties for the asset model.

This object doesn't include properties that you define in composite models. You can find composite model properties in the `assetModelCompositeModels` object.

Type: Array of AssetModelProperty objects

assetModelStatus

The current status of the asset model, which contains a state and any error message.

Type: AssetModelStatus object

assetModelType

The type of asset model.

- **ASSET_MODEL** – (default) An asset model that you can use to create assets. Can't be included as a component in another asset model.

- **COMPONENT_MODEL** – A reusable component that you can include in the composite models of other asset models. You can't create assets directly from this type of asset model.

Type: String

Valid Values: `ASSET_MODEL | COMPONENT_MODEL | INTERFACE`

assetModelVersion

The version of the asset model. See Asset model versions in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10.

Pattern: `^(0|([1-9]{1}\d*))$`

interfaceDetails

A list of interface details that describe the interfaces implemented by this asset model, including interface asset model IDs and property mappings.

Type: Array of InterfaceRelationship objects

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeAssetModelCompositeModel

Retrieves information about an asset model composite model (also known as an asset model component). For more information, see Custom composite models (Components) in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
GET /asset-models/assetModelId/composite-models/assetModelCompositeModelId?
assetModelVersion=assetModelVersion HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetModelCompositeModelId

The ID of a composite model on this asset model. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

assetModelId

The ID of the asset model. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

assetModelVersion

The version alias that specifies the latest or active version of the asset model. The details are returned in the response. The default value is `LATEST`. See Asset model versions in the *AWS IoT SiteWise User Guide*.

Pattern: `^(LATEST|ACTIVE)$`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "actionDefinitions": [
      {
         "actionDefinitionId": "string",
         "actionName": "string",
         "actionType": "string"
      }
   ],
   "assetModelCompositeModelDescription": "string",
   "assetModelCompositeModelExternalId": "string",
   "assetModelCompositeModelId": "string",
   "assetModelCompositeModelName": "string",
   "assetModelCompositeModelPath": [
      {
         "id": "string",
         "name": "string"
      }
   ],
   "assetModelCompositeModelProperties": [
      {
         "dataType": "string",
         "dataTypeSpec": "string",
         "externalId": "string",
         "id": "string",
         "name": "string",
```

```
        "path": [
           {
              "id": "string",
              "name": "string"
           }
        ],
        "type": {
           "attribute": {
              "defaultValue": "string"
           },
           "measurement": {
              "processingConfig": {
                 "forwardingConfig": {
                    "state": "string"
                 }
              }
           },
           "metric": {
              "expression": "string",
              "processingConfig": {
                 "computeLocation": "string"
              },
              "variables": [
                 {
                    "name": "string",
                    "value": {
                       "hierarchyId": "string",
                       "propertyId": "string",
                       "propertyPath": [
                          {
                             "id": "string",
                             "name": "string"
                          }
                       ]
                    }
                 }
              ],
              "window": {
                 "tumbling": {
                    "interval": "string",
                    "offset": "string"
                 }
              }
           },
```

```
            "transform": {
               "expression": "string",
               "processingConfig": {
                  "computeLocation": "string",
                  "forwardingConfig": {
                     "state": "string"
                  }
               },
               "variables": [
                  {
                     "name": "string",
                     "value": {
                        "hierarchyId": "string",
                        "propertyId": "string",
                        "propertyPath": [
                           {
                              "id": "string",
                              "name": "string"
                           }
                        ]
                     }
                  }
               ]
            }
         },
         "unit": "string"
      }
   ],
   "assetModelCompositeModelSummaries": [
      {
         "description": "string",
         "externalId": "string",
         "id": "string",
         "name": "string",
         "path": [
            {
               "id": "string",
               "name": "string"
            }
         ],
         "type": "string"
      }
   ],
   "assetModelCompositeModelType": "string",
```

```
    "assetModelId": "string",
    "compositionDetails": {
       "compositionRelationship": [
          {
             "id": "string"
          }
       ]
    }
}
```

Response Elements

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

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

actionDefinitions

The available actions for a composite model on this asset model.

Type: Array of ActionDefinition objects

assetModelCompositeModelDescription

The description for the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

assetModelCompositeModelExternalId

The external ID of a composite model on this asset model.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

assetModelCompositeModelId

The ID of a composite model on this asset model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetModelCompositeModelName

The unique, friendly name for the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

assetModelCompositeModelPath

The path to the composite model listing the parent composite models.

Type: Array of AssetModelCompositeModelPathSegment objects

assetModelCompositeModelProperties

The property definitions of the composite model.

Type: Array of AssetModelProperty objects

assetModelCompositeModelSummaries

The list of composite model summaries for the composite model.

Type: Array of AssetModelCompositeModelSummary objects

assetModelCompositeModelType

The composite model type. Valid values are `AWS/ALARM`, `CUSTOM`, or `AWS/L4E_ANOMALY`.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

assetModelId

The ID of the asset model, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

compositionDetails

Metadata for the composition relationship established by using `composedAssetModelId` in `CreateAssetModelCompositeModel`. For instance, an array detailing the path of the composition relationship for this composite model.

Type: CompositionDetails object

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeAssetModelInterfaceRelationship

Retrieves information about an interface relationship between an asset model and an interface asset model.

Request Syntax

```
GET /asset-models/assetModelId/interface/interfaceAssetModelId/asset-model-interface-
relationship HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetModelId

The ID of the asset model. This can be either the actual ID in UUID format, or else externalId: followed by the external ID.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

interfaceAssetModelId

The ID of the interface asset model. This can be either the actual ID in UUID format, or else externalId: followed by the external ID.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[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

{
   "assetModelId": "string",
   "hierarchyMappings": [
      {
         "assetModelHierarchyId": "string",
         "interfaceAssetModelHierarchyId": "string"
      }
   ],
   "interfaceAssetModelId": "string",
   "propertyMappings": [
      {
         "assetModelPropertyId": "string",
         "interfaceAssetModelPropertyId": "string"
      }
   ]
}
```

Response Elements

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

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

assetModelId

The ID of the asset model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

hierarchyMappings

A list of hierarchy mappings between the interface asset model and the asset model where the interface is applied.

Type: Array of HierarchyMapping objects

interfaceAssetModelId

The ID of the interface asset model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

propertyMappings

A list of property mappings between the interface asset model and the asset model where the interface is applied.

Type: Array of PropertyMapping objects

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeAssetProperty

Retrieves information about an asset property.

> **Note**
>
> When you call this operation for an attribute property, this response includes the default attribute value that you define in the asset model. If you update the default value in the model, this operation's response includes the new default value.

This operation doesn't return the value of the asset property. To get the value of an asset property, use GetAssetPropertyValue.

Request Syntax

```
GET /assets/assetId/properties/propertyId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the asset. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

propertyId

The ID of the asset property. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[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

{
   "assetExternalId": "string",
   "assetId": "string",
   "assetModelId": "string",
   "assetName": "string",
   "assetProperty": {
      "alias": "string",
      "dataType": "string",
      "externalId": "string",
      "id": "string",
      "name": "string",
      "notification": {
         "state": "string",
         "topic": "string"
      },
      "path": [
         {
            "id": "string",
            "name": "string"
         }
      ],
      "type": {
         "attribute": {
            "defaultValue": "string"
         },
```

```
            "measurement": {
               "processingConfig": {
                  "forwardingConfig": {
                     "state": "string"
                  }
               }
            },
            "metric": {
               "expression": "string",
               "processingConfig": {
                  "computeLocation": "string"
               },
               "variables": [
                  {
                     "name": "string",
                     "value": {
                        "hierarchyId": "string",
                        "propertyId": "string",
                        "propertyPath": [
                           {
                              "id": "string",
                              "name": "string"
                           }
                        ]
                     }
                  }
               ],
               "window": {
                  "tumbling": {
                     "interval": "string",
                     "offset": "string"
                  }
               }
            },
            "transform": {
               "expression": "string",
               "processingConfig": {
                  "computeLocation": "string",
                  "forwardingConfig": {
                     "state": "string"
                  }
               },
               "variables": [
                  {
```

```
                "name": "string",
                "value": {
                   "hierarchyId": "string",
                   "propertyId": "string",
                   "propertyPath": [
                      {
                         "id": "string",
                         "name": "string"
                      }
                   ]
                }
             }
          ]
       }
    },
    "unit": "string"
 },
 "compositeModel": {
    "assetProperty": {
       "alias": "string",
       "dataType": "string",
       "externalId": "string",
       "id": "string",
       "name": "string",
       "notification": {
          "state": "string",
          "topic": "string"
       },
       "path": [
          {
             "id": "string",
             "name": "string"
          }
       ],
       "type": {
          "attribute": {
             "defaultValue": "string"
          },
          "measurement": {
             "processingConfig": {
                "forwardingConfig": {
                   "state": "string"
                }
             }
```

```
            },
            "metric": {
               "expression": "string",
               "processingConfig": {
                  "computeLocation": "string"
               },
               "variables": [
                  {
                     "name": "string",
                     "value": {
                        "hierarchyId": "string",
                        "propertyId": "string",
                        "propertyPath": [
                           {
                              "id": "string",
                              "name": "string"
                           }
                        ]
                     }
                  }
               ],
               "window": {
                  "tumbling": {
                     "interval": "string",
                     "offset": "string"
                  }
               }
            },
            "transform": {
               "expression": "string",
               "processingConfig": {
                  "computeLocation": "string",
                  "forwardingConfig": {
                     "state": "string"
                  }
               },
               "variables": [
                  {
                     "name": "string",
                     "value": {
                        "hierarchyId": "string",
                        "propertyId": "string",
                        "propertyPath": [
                           {
```

```
                                "id": "string",
                                "name": "string"
                            }
                        ]
                    }
                }
            ]
        }
    },
    "unit": "string"
},
"externalId": "string",
"id": "string",
"name": "string",
"type": "string"
}
}
```

Response Elements

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

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

assetExternalId

The external ID of the asset. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

assetId

The ID of the asset, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetModelId

The ID of the asset model, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetName

The name of the asset.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

assetProperty

The asset property's definition, alias, and notification state.

This response includes this object for normal asset properties. If you describe an asset property in a composite model, this response includes the asset property information in `compositeModel`.

Type: Property object

compositeModel

The composite model that declares this asset property, if this asset property exists in a composite model.

Type: CompositeModelProperty object

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeBulkImportJob

Retrieves information about a bulk import job request. For more information, see Describe a bulk import job (AWS CLI) in the *Amazon Simple Storage Service User Guide*.

Request Syntax

```
GET /jobs/jobId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

jobId

The ID of the job.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "adaptiveIngestion": boolean,
   "deleteFilesAfterImport": boolean,
   "errorReportLocation": {
      "bucket": "string",
      "prefix": "string"
   },
```

```
    "files": [
       {
          "bucket": "string",
          "key": "string",
          "versionId": "string"
       }
    ],
    "jobConfiguration": {
       "fileFormat": {
          "csv": {
             "columnNames": [ "string" ]
          },
          "parquet": {
          }
       }
    },
    "jobCreationDate": number,
    "jobId": "string",
    "jobLastUpdateDate": number,
    "jobName": "string",
    "jobRoleArn": "string",
    "jobStatus": "string"
}
```

Response Elements

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

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

adaptiveIngestion

If set to true, ingest new data into AWS IoT SiteWise storage. Measurements with notifications, metrics and transforms are computed. If set to false, historical data is ingested into AWS IoT SiteWise as is.

Type: Boolean

deleteFilesAfterImport

If set to true, your data files is deleted from S3, after ingestion into AWS IoT SiteWise storage.

Type: Boolean

errorReportLocation

The Amazon S3 destination where errors associated with the job creation request are saved.

Type: ErrorReportLocation object

files

The files in the specified Amazon S3 bucket that contain your data.

Type: Array of File objects

jobConfiguration

Contains the configuration information of a job, such as the file format used to save data in Amazon S3.

Type: JobConfiguration object

jobCreationDate

The date the job was created, in Unix epoch TIME.

Type: Timestamp

jobId

The ID of the job.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

jobLastUpdateDate

The date the job was last updated, in Unix epoch time.

Type: Timestamp

jobName

The unique name that helps identify the job request.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

jobRoleArn

The ARN of the IAM role that allows AWS IoT SiteWise to read Amazon S3 data.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

jobStatus

The status of the bulk import job can be one of following values:

- `PENDING` – AWS IoT SiteWise is waiting for the current bulk import job to finish.
- `CANCELLED` – The bulk import job has been canceled.
- `RUNNING` – AWS IoT SiteWise is processing your request to import your data from Amazon S3.
- `COMPLETED` – AWS IoT SiteWise successfully completed your request to import data from Amazon S3.
- `FAILED` – AWS IoT SiteWise couldn't process your request to import data from Amazon S3. You can use logs saved in the specified error report location in Amazon S3 to troubleshoot issues.
- `COMPLETED_WITH_FAILURES` – AWS IoT SiteWise completed your request to import data from Amazon S3 with errors. You can use logs saved in the specified error report location in Amazon S3 to troubleshoot issues.

Type: String

Valid Values: `PENDING | CANCELLED | RUNNING | COMPLETED | FAILED | COMPLETED_WITH_FAILURES`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeComputationModel

Retrieves information about a computation model.

Request Syntax

```
GET /computation-models/computationModelId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

computationModelId

The ID of the computation model.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "actionDefinitions": [
      {
         "actionDefinitionId": "string",
         "actionName": "string",
         "actionType": "string"
      }
   ],
   "computationModelArn": "string",
```

```
    "computationModelConfiguration": {
       "anomalyDetection": {
          "inputProperties": "string",
          "resultProperty": "string"
       }
    },
    "computationModelCreationDate": number,
    "computationModelDataBinding": {
       "string" : {
          "assetModelProperty": {
             "assetModelId": "string",
             "propertyId": "string"
          },
          "assetProperty": {
             "assetId": "string",
             "propertyId": "string"
          },
          "list": [
             "ComputationModelDataBindingValue"
          ]
       }
    },
    "computationModelDescription": "string",
    "computationModelId": "string",
    "computationModelLastUpdateDate": number,
    "computationModelName": "string",
    "computationModelStatus": {
       "error": {
          "code": "string",
          "details": [
             {
                "code": "string",
                "message": "string"
             }
          ],
          "message": "string"
       },
       "state": "string"
    },
    "computationModelVersion": "string"
}
```

Response Elements

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

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

actionDefinitions

The available actions for this computation model.

Type: Array of ActionDefinition objects

computationModelArn

The ARN of the computation model, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:computation-model/${ComputationModelId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

computationModelConfiguration

The configuration for the computation model.

Type: ComputationModelConfiguration object

computationModelCreationDate

The model creation date, in Unix epoch time.

Type: Timestamp

computationModelDataBinding

The data binding for the computation model. Key is a variable name defined in configuration. Value is a `ComputationModelDataBindingValue` referenced by the variable.

Type: String to ComputationModelDataBindingValue object map

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

Key Pattern: `^[a-z][a-z0-9_]*$`

computationModelDescription

The description of the computation model.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

computationModelId

The ID of the computation model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

computationModelLastUpdateDate

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

Type: Timestamp

computationModelName

The name of the computation model.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

computationModelStatus

The current status of the asset model, which contains a state and an error message if any.

Type: ComputationModelStatus object

computationModelVersion

The version of the computation model.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10.

Pattern: `^(0|([1-9]{1}\d*))$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeComputationModelExecutionSummary

Retrieves information about the execution summary of a computation model.

Request Syntax

```
GET /computation-models/computationModelId/execution-summary?
resolveToResourceId=resolveToResourceId&resolveToResourceType=resolveToResourceType
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

computationModelId

The ID of the computation model.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

resolveToResourceId

The ID of the resolved resource.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

resolveToResourceType

The type of the resolved resource.

Valid Values: `ASSET`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "computationModelExecutionSummary": {
      "string" : "string"
   },
   "computationModelId": "string",
   "resolveTo": {
      "assetId": "string"
   }
}
```

Response Elements

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

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

computationModelExecutionSummary

Contains the execution summary of the computation model.

Type: String to string map

Key Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Value Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

computationModelId

The ID of the computation model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

resolveTo

The detailed resource this execution summary resolves to.

Type: ResolveTo object

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DescribeDashboard

Retrieves information about a dashboard.

Request Syntax

```
GET /dashboards/dashboardId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

dashboardId

The ID of the dashboard.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "dashboardArn": "string",
   "dashboardCreationDate": number,
   "dashboardDefinition": "string",
   "dashboardDescription": "string",
   "dashboardId": "string",
   "dashboardLastUpdateDate": number,
   "dashboardName": "string",
```

```
    "projectId": "string"
}
```

Response Elements

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

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

dashboardArn

The ARN of the dashboard, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:dashboard/${DashboardId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

dashboardCreationDate

The date the dashboard was created, in Unix epoch time.

Type: Timestamp

dashboardDefinition

The dashboard's definition JSON literal. For detailed information, see Creating dashboards (CLI) in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 204800.

Pattern: `.+`

dashboardDescription

The dashboard's description.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

dashboardId

The ID of the dashboard.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

dashboardLastUpdateDate

The date the dashboard was last updated, in Unix epoch time.

Type: Timestamp

dashboardName

The name of the dashboard.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

projectId

The ID of the project that the dashboard is in.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

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

DescribeDataset

Retrieves information about a dataset.

Request Syntax

```
GET /datasets/datasetId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

datasetId

The ID of the dataset.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "datasetArn": "string",
   "datasetCreationDate": number,
   "datasetDescription": "string",
   "datasetId": "string",
   "datasetLastUpdateDate": number,
   "datasetName": "string",
   "datasetSource": {
      "sourceDetail": {
```

```
            "kendra": {
               "knowledgeBaseArn": "string",
               "roleArn": "string"
            }
         },
         "sourceFormat": "string",
         "sourceType": "string"
      },
      "datasetStatus": {
         "error": {
            "code": "string",
            "details": [
               {
                  "code": "string",
                  "message": "string"
               }
            ],
            "message": "string"
         },
         "state": "string"
      },
      "datasetVersion": "string"
}
```

Response Elements

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

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

datasetArn

The ARN of the dataset. The format is `arn:${Partition}:iotsitewise:${Region}:${Account}:dataset/${DatasetId}`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

datasetCreationDate

The dataset creation date, in Unix epoch time.

Type: Timestamp

datasetDescription

A description about the dataset, and its functionality.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

datasetId

The ID of the dataset.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

datasetLastUpdateDate

The date the dataset was last updated, in Unix epoch time.

Type: Timestamp

datasetName

The name of the dataset.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

datasetSource

The data source for the dataset.

Type: DatasetSource object

datasetStatus

The status of the dataset. This contains the state and any error messages. State is `CREATING` after a successfull call to this API, and any associated error message. The state is `ACTIVE` when ready to use.

Type: DatasetStatus object

datasetVersion

The version of the dataset.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10.

Pattern: `^(0|([1-9]{1}\d*))$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeDefaultEncryptionConfiguration

Retrieves information about the default encryption configuration for the AWS account in the default or specified Region. For more information, see Key management in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
GET /configuration/account/encryption 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

{
   "configurationStatus": {
      "error": {
         "code": "string",
         "message": "string"
      },
      "state": "string"
   },
   "encryptionType": "string",
   "kmsKeyArn": "string"
}
```

Response Elements

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

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

configurationStatus

The status of the account configuration. This contains the `ConfigurationState`. If there's an error, it also contains the `ErrorDetails`.

Type: ConfigurationStatus object

encryptionType

The type of encryption used for the encryption configuration.

Type: String

Valid Values: `SITEWISE_DEFAULT_ENCRYPTION | KMS_BASED_ENCRYPTION`

kmsKeyArn

The key ARN of the customer managed key used for AWS KMS encryption if you use `KMS_BASED_ENCRYPTION`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeExecution

Retrieves information about the execution.

Request Syntax

```
GET /executions/executionId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

executionId

The ID of the execution.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "actionType": "string",
   "executionDetails": {
      "string" : "string"
   },
   "executionEndTime": number,
   "executionEntityVersion": "string",
   "executionId": "string",
   "executionResult": {
```

```
        "string" : "string"
    },
    "executionStartTime": number,
    "executionStatus": {
        "state": "string"
    },
    "resolveTo": {
        "assetId": "string"
    },
    "targetResource": {
        "assetId": "string",
        "computationModelId": "string"
    },
    "targetResourceVersion": "string"
}
```

Response Elements

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

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

actionType

The type of action exectued.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

executionDetails

Provides detailed information about the execution of your anomaly detection models. This includes model metrics and training timestamps for both training and inference actions.

- The training action (AWS/ANOMALY_DETECTION_TRAINING), includes performance metrics that help you compare different versions of your anomaly detection models. These metrics provide insights into the model's performance during the training process.
- The inference action (AWS/ANOMALY_DETECTION_INFERENCE), includes information about the results of executing your anomaly detection models. This helps you understand the output of your models and assess their performance.

Type: String to string map

Key Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Value Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

executionEndTime

The time the process ended.

Type: Timestamp

executionEntityVersion

Entity version used for the execution.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10.

Pattern: `^(0|([1-9]{1}\d*))$`

executionId

The ID of the execution.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

executionResult

The result of the execution.

Type: String to string map

Key Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Value Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

executionStartTime

The time the process started.

Type: Timestamp

executionStatus

The status of the execution process.

Type: ExecutionStatus object

resolveTo

The detailed resource this execution resolves to.

Type: ResolveTo object

targetResource

The resource the action will be taken on. This can include asset-based resources and computation model resources.

Type: TargetResource object

targetResourceVersion

The version of the target resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10.

Pattern: `^(0|([1-9]{1}\d*))$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeGateway

Retrieves information about a gateway.

Request Syntax

```
GET /20200301/gateways/gatewayId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

gatewayId

The ID of the gateway device.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "creationDate": number,
   "gatewayArn": "string",
   "gatewayCapabilitySummaries": [
      {
         "capabilityNamespace": "string",
         "capabilitySyncStatus": "string"
```

```
        }
    ],
    "gatewayId": "string",
    "gatewayName": "string",
    "gatewayPlatform": {
        "greengrass": {
            "groupArn": "string"
        },
        "greengrassV2": {
            "coreDeviceOperatingSystem": "string",
            "coreDeviceThingName": "string"
        },
        "siemensIE": {
            "iotCoreThingName": "string"
        }
    },
    "gatewayVersion": "string",
    "lastUpdateDate": number
}
```

Response Elements

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

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

creationDate

The date the gateway was created, in Unix epoch time.

Type: Timestamp

gatewayArn

The ARN of the gateway, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:gateway/${GatewayId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

gatewayCapabilitySummaries

A list of gateway capability summaries that each contain a namespace and status. Each gateway capability defines data sources for the gateway. To retrieve a capability configuration's definition, use DescribeGatewayCapabilityConfiguration.

Type: Array of GatewayCapabilitySummary objects

gatewayId

The ID of the gateway device.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

gatewayName

The name of the gateway.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

gatewayPlatform

The gateway's platform.

Type: GatewayPlatform object

gatewayVersion

The version of the gateway. A value of 3 indicates an MQTT-enabled, V3 gateway, while 2 indicates a Classic streams, V2 gateway.

Type: String

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

Pattern: `^[0-9]+$`

lastUpdateDate

The date the gateway was last updated, in Unix epoch time.

Type: Timestamp

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeGatewayCapabilityConfiguration

Each gateway capability defines data sources for a gateway. This is the namespace of the gateway capability.

. The namespace follows the format `service:capability:version`, where:

- `service` - The service providing the capability, or `iotsitewise`.
- `capability` - The specific capability type. Options include: `opcuacollector` for the OPC UA data source collector, or `publisher` for data publisher capability.
- `version` - The version number of the capability. Option include 2 for Classic streams, V2 gateways, and 3 for MQTT-enabled, V3 gateways.

After updating a capability configuration, the sync status becomes `OUT_OF_SYNC` until the gateway processes the configuration.Use `DescribeGatewayCapabilityConfiguration` to check the sync status and verify the configuration was applied.

A gateway can have multiple capability configurations with different namespaces.

Request Syntax

```
GET /20200301/gateways/gatewayId/capability/capabilityNamespace HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

capabilityNamespace

The namespace of the capability configuration. For example, if you configure OPC UA sources for an MQTT-enabled gateway, your OPC-UA capability configuration has the namespace `iotsitewise:opcuacollector:3`.

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

Pattern: `^[a-zA-Z]+:[a-zA-Z]+:[0-9]+$`

Required: Yes

gatewayId

The ID of the gateway that defines the capability configuration.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "capabilityConfiguration": "string",
   "capabilityNamespace": "string",
   "capabilitySyncStatus": "string",
   "gatewayId": "string"
}
```

Response Elements

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

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

capabilityConfiguration

The JSON document that defines the gateway capability's configuration. For more information, see Configuring data sources (CLI) in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10000000.

capabilityNamespace

The namespace of the gateway capability.

Type: String

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

Pattern: `^[a-zA-Z]+:[a-zA-Z]+:[0-9]+$`

capabilitySyncStatus

The synchronization status of the gateway capability configuration. The sync status can be one of the following:

- `IN_SYNC` - The gateway is running with the latest configuration.
- `OUT_OF_SYNC` - The gateway hasn't received the latest configuration.
- `SYNC_FAILED` - The gateway rejected the latest configuration.
- `UNKNOWN` - The gateway hasn't reported its sync status.
- `NOT_APPLICABLE` - The gateway doesn't support this capability. This is most common when integrating partner data sources, because the data integration is handled externally by the partner.

Type: String

Valid Values: `IN_SYNC | OUT_OF_SYNC | SYNC_FAILED | UNKNOWN | NOT_APPLICABLE`

gatewayId

The ID of the gateway that defines the capability configuration.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

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

DescribeLoggingOptions

Retrieves the current AWS IoT SiteWise 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": {
      "level": "string"
   }
}
```

Response Elements

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 logging options.

Type: LoggingOptions object

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DescribePortal

Retrieves information about a portal.

Request Syntax

```
GET /portals/portalId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

portalId

The ID of the portal.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "alarms": {
      "alarmRoleArn": "string",
      "notificationLambdaArn": "string"
   },
   "notificationSenderEmail": "string",
   "portalArn": "string",
   "portalAuthMode": "string",
```

```
    "portalClientId": "string",
    "portalContactEmail": "string",
    "portalCreationDate": number,
    "portalDescription": "string",
    "portalId": "string",
    "portalLastUpdateDate": number,
    "portalLogoImageLocation": {
       "id": "string",
       "url": "string"
    },
    "portalName": "string",
    "portalStartUrl": "string",
    "portalStatus": {
       "error": {
          "code": "string",
          "message": "string"
       },
       "state": "string"
    },
    "portalType": "string",
    "portalTypeConfiguration": {
       "string" : {
          "portalTools": [ "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.

alarms

Contains the configuration information of an alarm created in an AWS IoT SiteWise Monitor portal.

Type: Alarms object

notificationSenderEmail

The email address that sends alarm notifications.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[a-zA-Z0-9_\-\.\+]+@[a-zA-Z0-9_\-\.\+]+\.[a-zA-Z]{2,}$`

portalArn

The ARN of the portal, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:portal/${PortalId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

portalAuthMode

The service to use to authenticate users to the portal.

Type: String

Valid Values: `IAM | SSO`

portalClientId

The IAM Identity Center application generated client ID (used with IAM Identity Center API operations). AWS IoT SiteWise includes `portalClientId` for only portals that use IAM Identity Center to authenticate users.

Type: String

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

Pattern: `^[!-~]*`

portalContactEmail

The AWS administrator's contact email address.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[a-zA-Z0-9_\-\.\+]+@[a-zA-Z0-9_\-\.\+]+\.[a-zA-Z]{2,}$`

portalCreationDate

The date the portal was created, in Unix epoch time.

Type: Timestamp

portalDescription

The portal's description.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

portalId

The ID of the portal.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

portalLastUpdateDate

The date the portal was last updated, in Unix epoch time.

Type: Timestamp

portalLogoImageLocation

The portal's logo image, which is available at a URL.

Type: ImageLocation object

portalName

The name of the portal.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

portalStartUrl

The URL for the AWS IoT SiteWise Monitor portal. You can use this URL to access portals that use IAM Identity Center for authentication. For portals that use IAM for authentication, you must use the AWS IoT SiteWise console to get a URL that you can use to access the portal.

Type: String

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

Pattern: `^(http|https)\://\S+`

portalStatus

The current status of the portal, which contains a state and any error message.

Type: PortalStatus object

portalType

Define the type of portal. The value for AWS IoT SiteWise Monitor (Classic) is `SITEWISE_PORTAL_V1`. The value for AWS IoT SiteWise Monitor (AI-aware) is `SITEWISE_PORTAL_V2`.

Type: String

Valid Values: `SITEWISE_PORTAL_V1 | SITEWISE_PORTAL_V2`

portalTypeConfiguration

The configuration entry associated with the specific portal type. The value for AWS IoT SiteWise Monitor (Classic) is `SITEWISE_PORTAL_V1`. The value for AWS IoT SiteWise Monitor (AI-aware) is `SITEWISE_PORTAL_V2`.

Type: String to PortalTypeEntry object map

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

roleArn

The ARN of the service role that allows the portal's users to access your AWS IoT SiteWise resources on your behalf. For more information, see Using service roles for AWS IoT SiteWise Monitor in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.\+=,@]+$`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeProject

Retrieves information about a project.

Request Syntax

```
GET /projects/projectId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

projectId

The ID of the project.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "portalId": "string",
   "projectArn": "string",
   "projectCreationDate": number,
   "projectDescription": "string",
   "projectId": "string",
   "projectLastUpdateDate": number,
   "projectName": "string"
```

```
}
```

Response Elements

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

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

portalId

The ID of the portal that the project is in.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

projectArn

The ARN of the project, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:project/${ProjectId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

projectCreationDate

The date the project was created, in Unix epoch time.

Type: Timestamp

projectDescription

The project's description.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

projectId

The ID of the project.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

projectLastUpdateDate

The date the project was last updated, in Unix epoch time.

Type: Timestamp

projectName

The name of the project.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeStorageConfiguration

Retrieves information about the storage configuration for AWS IoT SiteWise.

Request Syntax

```
GET /configuration/account/storage 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

{
   "configurationStatus": {
      "error": {
         "code": "string",
         "message": "string"
      },
      "state": "string"
   },
   "disallowIngestNullNaN": boolean,
   "disassociatedDataStorage": "string",
   "lastUpdateDate": number,
   "multiLayerStorage": {
      "customerManagedS3Storage": {
         "roleArn": "string",
         "s3ResourceArn": "string"
      }
   },
   "retentionPeriod": {
      "numberOfDays": number,
      "unlimited": boolean
```

```
    },
    "storageType": "string",
    "warmTier": "string",
    "warmTierRetentionPeriod": {
       "numberOfDays": number,
       "unlimited": boolean
    }
}
```

Response Elements

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

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

configurationStatus

Contains current status information for the configuration.

Type: ConfigurationStatus object

disallowIngestNullNaN

Describes the configuration for ingesting NULL and NaN data. By default the feature is allowed. The feature is disallowed if the value is `true`.

Type: Boolean

disassociatedDataStorage

Contains the storage configuration for time series (data streams) that aren't associated with asset properties. The `disassociatedDataStorage` can be one of the following values:

- `ENABLED` – AWS IoT SiteWise accepts time series that aren't associated with asset properties.

  > **Important**
  >
  > After the `disassociatedDataStorage` is enabled, you can't disable it.

- `DISABLED` – AWS IoT SiteWise doesn't accept time series (data streams) that aren't associated with asset properties.

For more information, see Data streams in the *AWS IoT SiteWise User Guide*.

Type: String

Valid Values: `ENABLED | DISABLED`

lastUpdateDate

The date the storage configuration was last updated, in Unix epoch time.

Type: Timestamp

multiLayerStorage

Contains information about the storage destination.

Type: MultiLayerStorage object

retentionPeriod

The number of days your data is kept in the hot tier. By default, your data is kept indefinitely in the hot tier.

Type: RetentionPeriod object

storageType

The storage tier that you specified for your data. The `storageType` parameter can be one of the following values:

- `SITEWISE_DEFAULT_STORAGE` – AWS IoT SiteWise saves your data into the hot tier. The hot tier is a service-managed database.
- `MULTI_LAYER_STORAGE` – AWS IoT SiteWise saves your data in both the cold tier and the hot tier. The cold tier is a customer-managed Amazon S3 bucket.

Type: String

Valid Values: `SITEWISE_DEFAULT_STORAGE | MULTI_LAYER_STORAGE`

warmTier

A service managed storage tier optimized for analytical queries. It stores periodically uploaded, buffered and historical data ingested with the CreaeBulkImportJob API.

Type: String

Valid Values: `ENABLED | DISABLED`

warmTierRetentionPeriod

Set this period to specify how long your data is stored in the warm tier before it is deleted. You can set this only if cold tier is enabled.

Type: WarmTierRetentionPeriod object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DescribeTimeSeries

Retrieves information about a time series (data stream).

To identify a time series, do one of the following:

- If the time series isn't associated with an asset property, specify the `alias` of the time series.
- If the time series is associated with an asset property, specify one of the following:
  - The `alias` of the time series.
  - The `assetId` and `propertyId` that identifies the asset property.

Request Syntax

```
GET /timeseries/describe/?alias=alias&assetId=assetId&propertyId=propertyId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

alias

The alias that identifies the time series.

Length Constraints: Minimum length of 1.

Pattern: `[^\u0000-\u001F\u007F]+`

assetId

The ID of the asset in which the asset property was created. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

propertyId

The ID of the asset property. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "alias": "string",
   "assetId": "string",
   "dataType": "string",
   "dataTypeSpec": "string",
   "propertyId": "string",
   "timeSeriesArn": "string",
   "timeSeriesCreationDate": number,
   "timeSeriesId": "string",
   "timeSeriesLastUpdateDate": 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.

alias

The alias that identifies the time series.

Type: String

Length Constraints: Minimum length of 1.

Pattern: `[^\u0000-\u001F\u007F]+`

assetId

The ID of the asset in which the asset property was created.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

dataType

The data type of the time series.

If you specify `STRUCT`, you must also specify `dataTypeSpec` to identify the type of the structure for this time series.

Type: String

Valid Values: `STRING | INTEGER | DOUBLE | BOOLEAN | STRUCT`

dataTypeSpec

The data type of the structure for this time series. This parameter is required for time series that have the `STRUCT` data type.

The options for this parameter depend on the type of the composite model in which you created the asset property that is associated with your time series. Use `AWS/ALARM_STATE` for alarm state in alarm composite models.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

propertyId

The ID of the asset property, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

timeSeriesArn

The ARN of the time series, which has the following format.

```
arn:${Partition}:iotsitewise:${Region}:${Account}:time-series/
${TimeSeriesId}
```

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

timeSeriesCreationDate

The date that the time series was created, in Unix epoch time.

Type: Timestamp

timeSeriesId

The ID of the time series.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 73.

timeSeriesLastUpdateDate

The date that the time series was last updated, in Unix epoch time.

Type: Timestamp

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

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

DisassociateAssets

Disassociates a child asset from the given parent asset through a hierarchy defined in the parent asset's model.

Request Syntax

```
POST /assets/assetId/disassociate HTTP/1.1
Content-type: application/json

{
   "childAssetId": "string",
   "clientToken": "string",
   "hierarchyId": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the parent asset from which to disassociate the child asset. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

childAssetId

The ID of the child asset to disassociate. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

hierarchyId

The ID of a hierarchy in the parent asset's model. (This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.) Hierarchies allow different groupings of assets to be formed that all come from the same asset model. You can use the hierarchy ID to identify the correct asset to disassociate. For more information, see Asset hierarchies in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

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.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

DisassociateTimeSeriesFromAssetProperty

Disassociates a time series (data stream) from an asset property.

Request Syntax

```
POST /timeseries/disassociate/?alias=alias&assetId=assetId&propertyId=propertyId
 HTTP/1.1
Content-type: application/json

{
   "clientToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

alias

The alias that identifies the time series.

Length Constraints: Minimum length of 1.

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

assetId

The ID of the asset in which the asset property was created. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

propertyId

The ID of the asset property. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ExecuteAction

Executes an action on a target resource.

Request Syntax

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

{
   "actionDefinitionId": "string",
   "actionPayload": {
      "stringValue": "string"
   },
   "clientToken": "string",
   "resolveTo": {
      "assetId": "string"
   },
   "targetResource": {
      "assetId": "string",
      "computationModelId": "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

actionDefinitionId

The ID of the action definition.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

actionPayload

The JSON payload of the action.

Type: ActionPayload object

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

resolveTo

The detailed resource this action resolves to.

Type: ResolveTo object

Required: No

targetResource

The resource the action will be taken on.

Type: TargetResource object

Required: Yes

Response Syntax

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

{
```

```
    "actionId": "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.

actionId

The ID of the action.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python

- AWS SDK for Ruby V3

ExecuteQuery

Run SQL queries to retrieve metadata and time-series data from asset models, assets, measurements, metrics, transforms, and aggregates.

Request Syntax

```
POST /queries/execution HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "maxResults": number,
   "nextToken": "string",
   "queryStatement": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

maxResults

The maximum number of results to return at one time.

- Minimum is 1
- Maximum is 20000
- Default is 20000

Type: Integer

Valid Range: Minimum value of 1.

Required: No

nextToken

The string that specifies the next page of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Required: No

queryStatement

The AWS IoT SiteWise query statement.

Type: String

Length Constraints: Minimum length of 1.

Pattern: `^[\s\S]+$`

Required: Yes

Response Syntax

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

{
   "columns": [
      {
         "name": "string",
         "type": {
```

```
            "scalarType": "string"
         }
      }
   ],
   "nextToken": "string",
   "rows": [
      {
         "data": [
            {
               "arrayValue": [
                  "Datum"
               ],
               "nullValue": boolean,
               "rowValue": "Row",
               "scalarValue": "string"
            }
         ]
      }
   ]
}
```

Response Elements

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

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

columns

Represents a single column in the query results.

Type: Array of ColumnInfo objects

nextToken

The string that specifies the next page of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

rows

Represents a single row in the query results.

Type: Array of Row objects

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

Access is denied.

HTTP Status Code: 403

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

QueryTimeoutException

The query timed out.

HTTP Status Code: 400

ServiceUnavailableException

The requested service is unavailable.

HTTP Status Code: 503

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

ValidationException

The validation failed for this query.

HTTP Status Code: 400

See Also

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

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

GetAssetPropertyAggregates

Gets aggregated values for an asset property. For more information, see Querying aggregates in the *AWS IoT SiteWise User Guide*.

To identify an asset property, you must specify one of the following:

- The `assetId` and `propertyId` of an asset property.
- A `propertyAlias`, which is a data stream alias (for example, `/company/windfarm/3/turbine/7/temperature`). To define an asset property's alias, see UpdateAssetProperty.

Request Syntax

```
GET /properties/aggregates?
aggregateTypes=aggregateTypes&assetId=assetId&endDate=endDate&maxResults=maxResults&nextToken=n
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

aggregateTypes

The data aggregating function.

Array Members: Minimum number of 1 item.

Valid Values: `AVERAGE | COUNT | MAXIMUM | MINIMUM | SUM | STANDARD_DEVIATION`

Required: Yes

assetId

The ID of the asset, in UUID format.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

endDate

The inclusive end of the range from which to query historical data, expressed in seconds in Unix epoch time.

Required: Yes

maxResults

The maximum number of results to return for each paginated request. A result set is returned in the two cases, whichever occurs first.

- The size of the result set is equal to 1 MB.
- The number of data points in the result set is equal to the value of `maxResults`. The maximum value of `maxResults` is 2500.

Valid Range: Minimum value of 1.

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

propertyAlias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 1. Maximum length of 1000.

Pattern: `[^\u0000-\u001F\u007F]+`

propertyId

The ID of the asset property, in UUID format.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

qualities

The quality by which to filter asset data.

Array Members: Fixed number of 1 item.

Valid Values: `GOOD | BAD | UNCERTAIN`

resolution

The time interval over which to aggregate data.

Length Constraints: Minimum length of 2. Maximum length of 3.

Pattern: `1m|15m|1h|1d`

Required: Yes

startDate

The exclusive start of the range from which to query historical data, expressed in seconds in Unix epoch time.

Required: Yes

timeOrdering

The chronological sorting order of the requested information.

Default: `ASCENDING`

Valid Values: `ASCENDING | DESCENDING`

Request Body

The request does not have a request body.

Response Syntax

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

{
```

```
   "aggregatedValues": [
      {
         "quality": "string",
         "timestamp": number,
         "value": {
            "average": number,
            "count": number,
            "maximum": number,
            "minimum": number,
            "standardDeviation": number,
            "sum": 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.

aggregatedValues

The requested aggregated values.

Type: Array of AggregatedValue objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ServiceUnavailableException

The requested service is unavailable.

HTTP Status Code: 503

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetAssetPropertyValue

Gets an asset property's current value. For more information, see Querying current values in the *AWS IoT SiteWise User Guide*.

To identify an asset property, you must specify one of the following:

- The `assetId` and `propertyId` of an asset property.
- A `propertyAlias`, which is a data stream alias (for example, `/company/windfarm/3/turbine/7/temperature`). To define an asset property's alias, see UpdateAssetProperty.

Request Syntax

```
GET /properties/latest?
assetId=assetId&propertyAlias=propertyAlias&propertyId=propertyId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the asset, in UUID format.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

propertyAlias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 1. Maximum length of 1000.

Pattern: `[^\u0000-\u001F\u007F]+`

propertyId

The ID of the asset property, in UUID format.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "propertyValue": {
      "quality": "string",
      "timestamp": {
         "offsetInNanos": number,
         "timeInSeconds": number
      },
      "value": {
         "booleanValue": boolean,
         "doubleValue": number,
         "integerValue": number,
         "nullValue": {
            "valueType": "string"
         },
         "stringValue": "string"
      }
   }
}
```

Response Elements

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

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

propertyValue

The current asset property value.

Type: AssetPropertyValue object

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ServiceUnavailableException

The requested service is unavailable.

HTTP Status Code: 503

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

GetAssetPropertyValueHistory

Gets the history of an asset property's values. For more information, see Querying historical values in the *AWS IoT SiteWise User Guide*.

To identify an asset property, you must specify one of the following:

- The `assetId` and `propertyId` of an asset property.
- A `propertyAlias`, which is a data stream alias (for example, `/company/windfarm/3/turbine/7/temperature`). To define an asset property's alias, see UpdateAssetProperty.

Request Syntax

```
GET /properties/history?
assetId=assetId&endDate=endDate&maxResults=maxResults&nextToken=nextToken&propertyAlias=propert
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the asset, in UUID format.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

endDate

The inclusive end of the range from which to query historical data, expressed in seconds in Unix epoch time.

maxResults

The maximum number of results to return for each paginated request. A result set is returned in the two cases, whichever occurs first.

- The size of the result set is equal to 4 MB.

- The number of data points in the result set is equal to the value of `maxResults`. The maximum value of `maxResults` is 20000.

Valid Range: Minimum value of 1.

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

propertyAlias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 1. Maximum length of 1000.

Pattern: `[^\u0000-\u001F\u007F]+`

propertyId

The ID of the asset property, in UUID format.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

qualities

The quality by which to filter asset data.

Array Members: Fixed number of 1 item.

Valid Values: `GOOD | BAD | UNCERTAIN`

startDate

The exclusive start of the range from which to query historical data, expressed in seconds in Unix epoch time.

timeOrdering

The chronological sorting order of the requested information.

Default: `ASCENDING`

Valid Values: `ASCENDING | DESCENDING`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "assetPropertyValueHistory": [
      {
         "quality": "string",
         "timestamp": {
            "offsetInNanos": number,
            "timeInSeconds": number
         },
         "value": {
            "booleanValue": boolean,
            "doubleValue": number,
            "integerValue": number,
            "nullValue": {
               "valueType": "string"
            },
            "stringValue": "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.

assetPropertyValueHistory

The asset property's value history.

Type: Array of AssetPropertyValue objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ServiceUnavailableException

The requested service is unavailable.

HTTP Status Code: 503

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

GetInterpolatedAssetPropertyValues

Get interpolated values for an asset property for a specified time interval, during a period of time. If your time series is missing data points during the specified time interval, you can use interpolation to estimate the missing data.

For example, you can use this operation to return the interpolated temperature values for a wind turbine every 24 hours over a duration of 7 days.

To identify an asset property, you must specify one of the following:

- The `assetId` and `propertyId` of an asset property.
- A `propertyAlias`, which is a data stream alias (for example, `/company/windfarm/3/turbine/7/temperature`). To define an asset property's alias, see UpdateAssetProperty.

Request Syntax

```
GET /properties/interpolated?
assetId=assetId&endTimeInSeconds=endTimeInSeconds&endTimeOffsetInNanos=endTimeOffsetInNanos&int
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the asset, in UUID format.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

endTimeInSeconds

The inclusive end of the range from which to interpolate data, expressed in seconds in Unix epoch time.

Valid Range: Minimum value of 1. Maximum value of 9223372036854774.

Required: Yes

endTimeOffsetInNanos

The nanosecond offset converted from `endTimeInSeconds`.

Valid Range: Minimum value of 0. Maximum value of 999999999.

intervalInSeconds

The time interval in seconds over which to interpolate data. Each interval starts when the previous one ends.

Valid Range: Minimum value of 1. Maximum value of 320000000.

Required: Yes

intervalWindowInSeconds

The query interval for the window, in seconds. AWS IoT SiteWise computes each interpolated value by using data points from the timestamp of each interval, minus the window to the timestamp of each interval plus the window. If not specified, the window ranges between the start time minus the interval and the end time plus the interval.

> **Note**
>
> - If you specify a value for the `intervalWindowInSeconds` parameter, the value for the `type` parameter must be `LINEAR_INTERPOLATION`.
> - If a data point isn't found during the specified query window, AWS IoT SiteWise won't return an interpolated value for the interval. This indicates that there's a gap in the ingested data points.

For example, you can get the interpolated temperature values for a wind turbine every 24 hours over a duration of 7 days. If the interpolation starts on July 1, 2021, at 9 AM with a window of 2 hours, AWS IoT SiteWise uses the data points from 7 AM (9 AM minus 2 hours) to 11 AM (9 AM plus 2 hours) on July 2, 2021 to compute the first interpolated value. Next, AWS IoT SiteWise uses the data points from 7 AM (9 AM minus 2 hours) to 11 AM (9 AM plus 2 hours) on July 3, 2021 to compute the second interpolated value, and so on.

Valid Range: Minimum value of 1. Maximum value of 320000000.

maxResults

The maximum number of results to return for each paginated request. If not specified, the default value is 10.

Valid Range: Minimum value of 1.

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

propertyAlias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 1. Maximum length of 1000.

Pattern: `[^\u0000-\u001F\u007F]+`

propertyId

The ID of the asset property, in UUID format.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

quality

The quality of the asset property value. You can use this parameter as a filter to choose only the asset property values that have a specific quality.

Valid Values: `GOOD | BAD | UNCERTAIN`

Required: Yes

startTimeInSeconds

The exclusive start of the range from which to interpolate data, expressed in seconds in Unix epoch time.

Valid Range: Minimum value of 1. Maximum value of 9223372036854774.

Required: Yes

startTimeOffsetInNanos

The nanosecond offset converted from `startTimeInSeconds`.

Valid Range: Minimum value of 0. Maximum value of 999999999.

type

The interpolation type.

Valid values: `LINEAR_INTERPOLATION | LOCF_INTERPOLATION`

- `LINEAR_INTERPOLATION` – Estimates missing data using linear interpolation.

  For example, you can use this operation to return the interpolated temperature values for a wind turbine every 24 hours over a duration of 7 days. If the interpolation starts July 1, 2021, at 9 AM, AWS IoT SiteWise returns the first interpolated value on July 2, 2021, at 9 AM, the second interpolated value on July 3, 2021, at 9 AM, and so on.
- `LOCF_INTERPOLATION` – Estimates missing data using last observation carried forward interpolation

  If no data point is found for an interval, AWS IoT SiteWise returns the last observed data point for the previous interval and carries forward this interpolated value until a new data point is found.

  For example, you can get the state of an on-off valve every 24 hours over a duration of 7 days. If the interpolation starts July 1, 2021, at 9 AM, AWS IoT SiteWise returns the last observed data point between July 1, 2021, at 9 AM and July 2, 2021, at 9 AM as the first interpolated value. If a data point isn't found after 9 AM on July 2, 2021, AWS IoT SiteWise uses the same interpolated value for the rest of the days.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "interpolatedAssetPropertyValues": [
      {
         "timestamp": {
            "offsetInNanos": number,
            "timeInSeconds": number
         },
         "value": {
            "booleanValue": boolean,
            "doubleValue": number,
            "integerValue": number,
            "nullValue": {
               "valueType": "string"
            },
            "stringValue": "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.

interpolatedAssetPropertyValues

The requested interpolated values.

Type: Array of InterpolatedAssetPropertyValue objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ServiceUnavailableException

The requested service is unavailable.

HTTP Status Code: 503

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

Examples

Example

The following example uses the AWS Command Line Interface (AWS CLI) to retrieve the interpolated temperature values for a wind turbine every 24 hours between April 26, 2021 at midnight and May 3, 2021 at midnight in Pacific Time (PT).

> **Note**
>
> - Replace `<asset-ID>` and `<property-ID>` with your asset ID and property ID.
> - The `--start-time-offset-in-nanos` and `--end-time-offset-in-nanos` parameters are optional. You can use these parameters to specify the nanosecond offsets for `startTimeInSeconds` and `startTimeInSeconds`.

Sample Request

```
aws iotsitewise get-interpolated-asset-property-values --asset-id <asset-ID> --
property-id <property-ID> --start-time-in-seconds 1619420400 --start-time-offset-in-
nanos 0 --end-time-in-seconds 1620025200
          --end-time-offset-in-nanos 0 --end-time-offset-in-nanos 1 --quality GOOD  --
interval-in-seconds 3600 --type LINEAR_INTERPOLATION
```

Sample Response

```
{
    "interpolatedAssetPropertyValues": [
        {
            "timestamp": {
                "timeInSeconds": 1619420400,
                "offsetInNanos": 0
            },
            "value": {
                "doubleValue": 30.0
            }
        },
        {
            "timestamp": {
                "timeInSeconds": 1619424000,
```

```
                "offsetInNanos": 0
            },
            "value": {
                "doubleValue": 41.25
            }
        },
        {
            "timestamp": {
                "timeInSeconds": 1619427600,
                "offsetInNanos": 0
            },
            "value": {
                "doubleValue": 35.85
            }
        },
        ...
    ],
    ...
}
```

See Also

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

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

InvokeAssistant

Invokes SiteWise Assistant to start or continue a conversation.

Request Syntax

```
POST /assistant/invocation HTTP/1.1
Content-type: application/json

{
   "conversationId": "string",
   "enableTrace": boolean,
   "message": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

conversationId

The ID assigned to a conversation. AWS IoT SiteWise automatically generates a unique ID for you, and this parameter is never required. However, if you prefer to have your own ID, you must specify it here in UUID format. If you specify your own ID, it must be globally unique.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}`

Required: No

enableTrace

Specifies if to turn trace on or not. It is used to track the SiteWise Assistant's reasoning, and data access process.

Type: Boolean

Required: No

message

A text message sent to the SiteWise Assistant by the user.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10000.

Required: Yes

Response Syntax

```
HTTP/1.1 200
x-amz-iotsitewise-assistant-conversation-id: conversationId
Content-type: application/json

{
   "accessDeniedException": {
   },
   "conflictingOperationException": {
   },
   "internalFailureException": {
   },
   "invalidRequestException": {
   },
   "limitExceededException": {
   },
   "output": {
      "citations": [
         {
            "content": {
               "text": "string"
            },
            "reference": {
               "dataset": {
                  "datasetArn": "string",
                  "source": {
                     "arn": "string",
                     "location": {
```

```
                        "uri": "string"
                    }
                }
            }
        }
    }
    ],
    "message": "string"
  },
  "resourceNotFoundException": {
  },
  "throttlingException": {
  },
  "trace": {
    "text": "string"
  }
}
```

Response Elements

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

The response returns the following HTTP headers.

conversationId

The ID of the conversation, in UUID format. This ID uniquely identifies the conversation within AWS IoT SiteWise.

Length Constraints: Fixed length of 36.

Pattern: `[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}`

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

accessDeniedException

Access is denied.

Type: Exception
HTTP Status Code: 403

conflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

Type: Exception
HTTP Status Code: 409

internalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

Type: Exception
HTTP Status Code: 500

invalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

Type: Exception
HTTP Status Code: 400

limitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: Exception
HTTP Status Code: 410

output

Contains the SiteWise Assistant's response.

Type: InvocationOutput object

resourceNotFoundException

The requested resource can't be found.

Type: Exception
HTTP Status Code: 404

throttlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: Exception
HTTP Status Code: 429

trace

Contains tracing information of the SiteWise Assistant's reasoning and data access.

Type: Trace object

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

Access is denied.

HTTP Status Code: 403

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3

- AWS SDK for Python
- AWS SDK for Ruby V3

ListAccessPolicies

Retrieves a paginated list of access policies for an identity (an IAM Identity Center user, an IAM Identity Center group, or an IAM user) or an AWS IoT SiteWise Monitor resource (a portal or project).

Request Syntax

```
GET /access-policies?
iamArn=iamArn&identityId=identityId&identityType=identityType&maxResults=maxResults&nextToken=n
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

iamArn

The ARN of the IAM user. For more information, see IAM ARNs in the *IAM User Guide*. This parameter is required if you specify `IAM` for `identityType`.

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.\+=,@]+$`

identityId

The ID of the identity. This parameter is required if you specify `USER` or `GROUP` for `identityType`.

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

Pattern: `\S+`

identityType

The type of identity (IAM Identity Center user, IAM Identity Center group, or IAM user). This parameter is required if you specify `identityId`.

Valid Values: `USER | GROUP | IAM`

maxResults

The maximum number of results to return for each paginated request.

Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

resourceId

The ID of the resource. This parameter is required if you specify `resourceType`.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

resourceType

The type of resource (portal or project). This parameter is required if you specify `resourceId`.

Valid Values: `PORTAL | PROJECT`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "accessPolicySummaries": [
      {
         "creationDate": number,
         "id": "string",
         "identity": {
            "group": {
```

```
                "id": "string"
            },
            "iamRole": {
                "arn": "string"
            },
            "iamUser": {
                "arn": "string"
            },
            "user": {
                "id": "string"
            }
        },
        "lastUpdateDate": number,
        "permission": "string",
        "resource": {
            "portal": {
                "id": "string"
            },
            "project": {
                "id": "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.

accessPolicySummaries

A list that summarizes each access policy.

Type: Array of AccessPolicySummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListActions

Retrieves a paginated list of actions for a specific target resource.

Request Syntax

```
GET /actions?
maxResults=maxResults&nextToken=nextToken&resolveToResourceId=resolveToResourceId&resolveToReso
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of results to return for each paginated request.

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

resolveToResourceId

The ID of the resolved resource.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

resolveToResourceType

The type of the resolved resource.

Valid Values: ASSET

targetResourceId

The ID of the target resource.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

targetResourceType

The type of resource.

Valid Values: `ASSET | COMPUTATION_MODEL`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "actionSummaries": [
      {
         "actionDefinitionId": "string",
         "actionId": "string",
         "resolveTo": {
            "assetId": "string"
         },
         "targetResource": {
            "assetId": "string",
            "computationModelId": "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.

actionSummaries

A list that summarizes the actions associated with the specified asset.

Type: Array of ActionSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListAssetModelCompositeModels

Retrieves a paginated list of composite models associated with the asset model

Request Syntax

```
GET /asset-models/assetModelId/composite-models?
assetModelVersion=assetModelVersion&maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetModelId

The ID of the asset model. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

assetModelVersion

The version alias that specifies the latest or active version of the asset model. The details are returned in the response. The default value is `LATEST`. See Asset model versions in the *AWS IoT SiteWise User Guide*.

Pattern: `^(LATEST|ACTIVE)$`

maxResults

The maximum number of results to return for each paginated request.

Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

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

{
   "assetModelCompositeModelSummaries": [
      {
         "description": "string",
         "externalId": "string",
         "id": "string",
         "name": "string",
         "path": [
            {
               "id": "string",
               "name": "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.

assetModelCompositeModelSummaries

A list that summarizes each composite model.

Type: Array of AssetModelCompositeModelSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListAssetModelProperties

Retrieves a paginated list of properties associated with an asset model. If you update properties associated with the model before you finish listing all the properties, you need to start all over again.

Request Syntax

```
GET /asset-models/assetModelId/properties?
assetModelVersion=assetModelVersion&filter=filter&maxResults=maxResults&nextToken=nextToken
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetModelId

The ID of the asset model. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

assetModelVersion

The version alias that specifies the latest or active version of the asset model. The details are returned in the response. The default value is `LATEST`. See Asset model versions in the *AWS IoT SiteWise User Guide*.

Pattern: `^(LATEST|ACTIVE)$`

filter

Filters the requested list of asset model properties. You can choose one of the following options:

- ALL – The list includes all asset model properties for a given asset model ID.
- BASE – The list includes only base asset model properties for a given asset model ID.

Default: BASE

Valid Values: ALL | BASE

maxResults

The maximum number of results to return for each paginated request. If not specified, the default value is 50.

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

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

{
   "assetModelPropertySummaries": [
      {
         "assetModelCompositeModelId": "string",
         "dataType": "string",
         "dataTypeSpec": "string",
         "externalId": "string",
         "id": "string",
         "interfaceSummaries": [
            {
               "interfaceAssetModelId": "string",
               "interfaceAssetModelPropertyId": "string"
            }
```

```
        ],
        "name": "string",
        "path": [
           {
              "id": "string",
              "name": "string"
           }
        ],
        "type": {
           "attribute": {
              "defaultValue": "string"
           },
           "measurement": {
              "processingConfig": {
                 "forwardingConfig": {
                    "state": "string"
                 }
              }
           },
           "metric": {
              "expression": "string",
              "processingConfig": {
                 "computeLocation": "string"
              },
              "variables": [
                 {
                    "name": "string",
                    "value": {
                       "hierarchyId": "string",
                       "propertyId": "string",
                       "propertyPath": [
                          {
                             "id": "string",
                             "name": "string"
                          }
                       ]
                    }
                 }
              ],
              "window": {
                 "tumbling": {
                    "interval": "string",
                    "offset": "string"
                 }
```

```
                }
            },
            "transform": {
                "expression": "string",
                "processingConfig": {
                    "computeLocation": "string",
                    "forwardingConfig": {
                        "state": "string"
                    }
                },
                "variables": [
                    {
                        "name": "string",
                        "value": {
                            "hierarchyId": "string",
                            "propertyId": "string",
                            "propertyPath": [
                                {
                                    "id": "string",
                                    "name": "string"
                                }
                            ]
                        }
                    }
                ]
            }
        },
        "unit": "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.

assetModelPropertySummaries

A list that summarizes the properties associated with the specified asset model.

Type: Array of AssetModelPropertySummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListAssetModels

Retrieves a paginated list of summaries of all asset models.

Request Syntax

```
GET /asset-models?
assetModelTypes=assetModelTypes&assetModelVersion=assetModelVersion&maxResults=maxResults&nextT
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetModelTypes

The type of asset model. If you don't provide an `assetModelTypes`, all types of asset models are returned.

- **ASSET_MODEL** – An asset model that you can use to create assets. Can't be included as a component in another asset model.
- **COMPONENT_MODEL** – A reusable component that you can include in the composite models of other asset models. You can't create assets directly from this type of asset model.
- **INTERFACE** – An interface is a type of model that defines a standard structure that can be applied to different asset models.

Valid Values: `ASSET_MODEL | COMPONENT_MODEL | INTERFACE`

assetModelVersion

The version alias that specifies the latest or active version of the asset model. The details are returned in the response. The default value is `LATEST`. See Asset model versions in the *AWS IoT SiteWise User Guide*.

Pattern: `^(LATEST|ACTIVE)$`

maxResults

The maximum number of results to return for each paginated request.

Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

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

{
   "assetModelSummaries": [
      {
         "arn": "string",
         "assetModelType": "string",
         "creationDate": number,
         "description": "string",
         "externalId": "string",
         "id": "string",
         "lastUpdateDate": number,
         "name": "string",
         "status": {
            "error": {
               "code": "string",
               "details": [
                  {
                     "code": "string",
                     "message": "string"
                  }
               ],
               "message": "string"
            },
            "state": "string"
         },
```

```
            "version": "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.

assetModelSummaries

A list that summarizes each asset model.

Type: Array of AssetModelSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListAssetProperties

Retrieves a paginated list of properties associated with an asset. If you update properties associated with the model before you finish listing all the properties, you need to start all over again.

Request Syntax

```
GET /assets/assetId/properties?filter=filter&maxResults=maxResults&nextToken=nextToken
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the asset. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

filter

Filters the requested list of asset properties. You can choose one of the following options:

- ALL – The list includes all asset properties for a given asset model ID.
- BASE – The list includes only base asset properties for a given asset model ID.

Default: BASE

Valid Values: ALL | BASE

maxResults

The maximum number of results to return for each paginated request. If not specified, the default value is 50.

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

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

{
   "assetPropertySummaries": [
      {
         "alias": "string",
         "assetCompositeModelId": "string",
         "externalId": "string",
         "id": "string",
         "notification": {
            "state": "string",
            "topic": "string"
         },
         "path": [
            {
               "id": "string",
               "name": "string"
            }
         ],
         "unit": "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.

assetPropertySummaries

A list that summarizes the properties associated with the specified asset.

Type: Array of AssetPropertySummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListAssetRelationships

Retrieves a paginated list of asset relationships for an asset. You can use this operation to identify an asset's root asset and all associated assets between that asset and its root.

Request Syntax

```
GET /assets/assetId/assetRelationships?
maxResults=maxResults&nextToken=nextToken&traversalType=traversalType HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the asset. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

maxResults

The maximum number of results to return for each paginated request.

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

traversalType

The type of traversal to use to identify asset relationships. Choose the following option:

- PATH_TO_ROOT – Identify the asset's parent assets up to the root asset. The asset that you specify in `assetId` is the first result in the list of `assetRelationshipSummaries`, and the root asset is the last result.

Valid Values: PATH_TO_ROOT

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "assetRelationshipSummaries": [
      {
         "hierarchyInfo": {
            "childAssetId": "string",
            "parentAssetId": "string"
         },
         "relationshipType": "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.

assetRelationshipSummaries

A list that summarizes each asset relationship.

Type: Array of AssetRelationshipSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListAssets

Retrieves a paginated list of asset summaries.

You can use this operation to do the following:

- List assets based on a specific asset model.
- List top-level assets.

You can't use this operation to list all assets. To retrieve summaries for all of your assets, use ListAssetModels to get all of your asset model IDs. Then, use ListAssets to get all assets for each asset model.

Request Syntax

```
GET /assets?
assetModelId=assetModelId&filter=filter&maxResults=maxResults&nextToken=nextToken
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetModelId

The ID of the asset model by which to filter the list of assets. This parameter is required if you choose `ALL` for `filter`. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

filter

The filter for the requested list of assets. Choose one of the following options:

- ALL – The list includes all assets for a given asset model ID. The `assetModelId` parameter is required if you filter by ALL.
- TOP_LEVEL – The list includes only top-level assets in the asset hierarchy tree.

Default: ALL

Valid Values: ALL | TOP_LEVEL

maxResults

The maximum number of results to return for each paginated request.

Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

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

{
   "assetSummaries": [
      {
         "arn": "string",
         "assetModelId": "string",
         "creationDate": number,
         "description": "string",
         "externalId": "string",
         "hierarchies": [
```

```
            {
               "externalId": "string",
               "id": "string",
               "name": "string"
            }
         ],
         "id": "string",
         "lastUpdateDate": number,
         "name": "string",
         "status": {
            "error": {
               "code": "string",
               "details": [
                  {
                     "code": "string",
                     "message": "string"
                  }
               ],
               "message": "string"
            },
            "state": "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.

assetSummaries

A list that summarizes each asset.

Type: Array of AssetSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListAssociatedAssets

Retrieves a paginated list of associated assets.

You can use this operation to do the following:

- `CHILD` - List all child assets associated to the asset.
- `PARENT` - List the asset's parent asset.

Request Syntax

```
GET /assets/assetId/hierarchies?
hierarchyId=hierarchyId&maxResults=maxResults&nextToken=nextToken&traversalDirection=traversalD
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the asset to query. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

hierarchyId

(Optional) If you don't provide a `hierarchyId`, all the immediate assets in the `traversalDirection` will be returned.

The ID of the hierarchy by which child assets are associated to the asset. (This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one.

For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.)

For more information, see Asset hierarchies in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

maxResults

The maximum number of results to return for each paginated request.

Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

traversalDirection

The direction to list associated assets. Choose one of the following options:

- `CHILD` – The list includes all child assets associated to the asset.
- `PARENT` – The list includes the asset's parent asset.

Default: `CHILD`

Valid Values: `PARENT | CHILD`

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "assetSummaries": [
      {
         "arn": "string",
         "assetModelId": "string",
         "creationDate": number,
         "description": "string",
         "externalId": "string",
         "hierarchies": [
            {
               "externalId": "string",
               "id": "string",
               "name": "string"
            }
         ],
         "id": "string",
         "lastUpdateDate": number,
         "name": "string",
         "status": {
            "error": {
               "code": "string",
               "details": [
                  {
                     "code": "string",
                     "message": "string"
                  }
               ],
               "message": "string"
            },
            "state": "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.

assetSummaries

A list that summarizes the associated assets.

Type: Array of AssociatedAssetsSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListBulkImportJobs

Retrieves a paginated list of bulk import job requests. For more information, see List bulk import jobs (AWS CLI) in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
GET /jobs?filter=filter&maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

filter

You can use a filter to select the bulk import jobs that you want to retrieve.

Valid Values: `ALL | PENDING | RUNNING | CANCELLED | FAILED | COMPLETED_WITH_FAILURES | COMPLETED`

maxResults

The maximum number of results to return for each paginated request.

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

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

{
   "jobSummaries": [
      {
         "id": "string",
         "name": "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.

jobSummaries

One or more job summaries to list.

Type: Array of JobSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListCompositionRelationships

Retrieves a paginated list of composition relationships for an asset model of type `COMPONENT_MODEL`.

Request Syntax

```
GET /asset-models/assetModelId/composition-relationships?
maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

assetModelId

The ID of the asset model. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

maxResults

The maximum number of results to return for each paginated request.

Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

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

{
   "compositionRelationshipSummaries": [
      {
         "assetModelCompositeModelId": "string",
         "assetModelCompositeModelType": "string",
         "assetModelId": "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.

compositionRelationshipSummaries

A list that summarizes each composition relationship.

Type: Array of CompositionRelationshipSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListComputationModelDataBindingUsages

Lists all data binding usages for computation models. This allows to identify where specific data bindings are being utilized across the computation models. This track dependencies between data sources and computation models.

Request Syntax

```
POST /computation-models/data-binding-usages HTTP/1.1
Content-type: application/json

{
   "dataBindingValueFilter": {
      "asset": {
         "assetId": "string"
      },
      "assetModel": {
         "assetModelId": "string"
      },
      "assetModelProperty": {
         "assetModelId": "string",
         "propertyId": "string"
      },
      "assetProperty": {
         "assetId": "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.

dataBindingValueFilter

A filter used to limit the returned data binding usages based on specific data binding values. You can filter by asset, asset model, asset property, or asset model property to find all computation models using these specific data sources.

Type: DataBindingValueFilter object

Required: Yes

maxResults

The maximum number of results returned for each paginated request.

Type: Integer

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

Required: No

nextToken

The token used for the next set of paginated results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Required: No

Response Syntax

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

{
   "dataBindingUsageSummaries": [
      {
         "computationModelIds": [ "string" ],
         "matchedDataBinding": {
```

```
            "value": {
               "assetModelProperty": {
                  "assetModelId": "string",
                  "propertyId": "string"
               },
               "assetProperty": {
                  "assetId": "string",
                  "propertyId": "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.

dataBindingUsageSummaries

A list of summaries describing the data binding usages across computation models. Each summary includes the computation model IDs and the matched data binding details.

Type: Array of ComputationModelDataBindingUsageSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListComputationModelResolveToResources

Lists all distinct resources that are resolved from the executed actions of the computation model.

Request Syntax

```
GET /computation-models/computationModelId/resolve-to-resources?
maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

computationModelId

The ID of the computation model for which to list resolved resources.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

maxResults

The maximum number of results returned for each paginated request.

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

nextToken

The token used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

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

{
   "computationModelResolveToResourceSummaries": [
      {
         "resolveTo": {
            "assetId": "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.

computationModelResolveToResourceSummaries

A list of summaries describing the distinct resources that this computation model resolves to when actions were executed.

Type: Array of ComputationModelResolveToResourceSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

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

ListComputationModels

Retrieves a paginated list of summaries of all computation models.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

computationModelType

The type of computation model. If a `computationModelType` is not provided, all types of computation models are returned.

Valid Values: `ANOMALY_DETECTION`

maxResults

The maximum number of results to return for each paginated request.

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

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

{
   "computationModelSummaries": [
      {
         "arn": "string",
         "creationDate": number,
         "description": "string",
         "id": "string",
         "lastUpdateDate": number,
         "name": "string",
         "status": {
            "error": {
               "code": "string",
               "details": [
                  {
                     "code": "string",
                     "message": "string"
                  }
               ],
               "message": "string"
            },
            "state": "string"
         },
         "type": "string",
         "version": "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.

computationModelSummaries

A list summarizing each computation model.

Type: Array of ComputationModelSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListDashboards

Retrieves a paginated list of dashboards for an AWS IoT SiteWise Monitor project.

Request Syntax

```
GET /dashboards?maxResults=maxResults&nextToken=nextToken&projectId=projectId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of results to return for each paginated request.

Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

projectId

The ID of the project.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "dashboardSummaries": [
      {
         "creationDate": number,
         "description": "string",
         "id": "string",
         "lastUpdateDate": number,
         "name": "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.

dashboardSummaries

A list that summarizes each dashboard in the project.

Type: Array of DashboardSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListDatasets

Retrieves a paginated list of datasets for a specific target resource.

Request Syntax

```
GET /datasets?maxResults=maxResults&nextToken=nextToken&sourceType=sourceType HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of results to return for each paginated request.

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

nextToken

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

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

sourceType

The type of data source for the dataset.

Valid Values: `KENDRA`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "datasetSummaries": [
      {
         "arn": "string",
         "creationDate": number,
         "description": "string",
         "id": "string",
         "lastUpdateDate": number,
         "name": "string",
         "status": {
            "error": {
               "code": "string",
               "details": [
                  {
                     "code": "string",
                     "message": "string"
                  }
               ],
               "message": "string"
            },
            "state": "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.

datasetSummaries

A list that summarizes the dataset response.

Type: Array of DatasetSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListExecutions

Retrieves a paginated list of summaries of all executions.

Request Syntax

```
GET /executions?
actionType=actionType&maxResults=maxResults&nextToken=nextToken&resolveToResourceId=resolveToRe
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

actionType

The type of action exectued.

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

Pattern: `[^\u0000-\u001F\u007F]+`

maxResults

The maximum number of results returned for each paginated request.

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

nextToken

The token used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

resolveToResourceId

The ID of the resolved resource.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

resolveToResourceType

The type of the resolved resource.

Valid Values: `ASSET`

targetResourceId

The ID of the target resource.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

targetResourceType

The type of the target resource.

Valid Values: `ASSET | COMPUTATION_MODEL`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "executionSummaries": [
      {
         "actionType": "string",
         "executionEndTime": number,
         "executionEntityVersion": "string",
         "executionId": "string",
         "executionStartTime": number,
         "executionStatus": {
            "state": "string"
```

```
            },
            "resolveTo": {
               "assetId": "string"
            },
            "targetResource": {
               "assetId": "string",
               "computationModelId": "string"
            },
            "targetResourceVersion": "string"
         }
      ],
      "nextToken": "string"
   }
```

Response Elements

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

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

executionSummaries

Contains the list of execution summaries of the computation models.

Type: Array of ExecutionSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListGateways

Retrieves a paginated list of gateways.

Request Syntax

```
GET /20200301/gateways?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of results to return for each paginated request.

Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

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

{
   "gatewaySummaries": [
      {
         "creationDate": number,
```

```
            "gatewayCapabilitySummaries": [
               {
                  "capabilityNamespace": "string",
                  "capabilitySyncStatus": "string"
               }
            ],
            "gatewayId": "string",
            "gatewayName": "string",
            "gatewayPlatform": {
               "greengrass": {
                  "groupArn": "string"
               },
               "greengrassV2": {
                  "coreDeviceOperatingSystem": "string",
                  "coreDeviceThingName": "string"
               },
               "siemensIE": {
                  "iotCoreThingName": "string"
               }
            },
            "gatewayVersion": "string",
            "lastUpdateDate": 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.

gatewaySummaries

A list that summarizes each gateway.

Type: Array of GatewaySummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2

- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListInterfaceRelationships

Retrieves a paginated list of asset models that have a specific interface asset model applied to them.

Request Syntax

```
GET /interface/interfaceAssetModelId/asset-models?
maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

interfaceAssetModelId

The ID of the interface asset model. This can be either the actual ID in UUID format, or else externalId: followed by the external ID.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

maxResults

The maximum number of results to return for each paginated request. Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

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

{
   "interfaceRelationshipSummaries": [
      {
         "id": "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.

interfaceRelationshipSummaries

A list that summarizes each interface relationship.

Type: Array of InterfaceRelationshipSummary objects

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

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

ListPortals

Retrieves a paginated list of AWS IoT SiteWise Monitor portals.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of results to return for each paginated request.

Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "nextToken": "string",
   "portalSummaries": [
      {
         "creationDate": number,
```

```
            "description": "string",
            "id": "string",
            "lastUpdateDate": number,
            "name": "string",
            "portalType": "string",
            "roleArn": "string",
            "startUrl": "string",
            "status": {
               "error": {
                  "code": "string",
                  "message": "string"
               },
               "state": "string"
            }
         }
      ]
   }
```

Response Elements

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

portalSummaries

A list that summarizes each portal.

Type: Array of PortalSummary objects

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListProjectAssets

Retrieves a paginated list of assets associated with an AWS IoT SiteWise Monitor project.

Request Syntax

```
GET /projects/projectId/assets?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of results to return for each paginated request.

Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

projectId

The ID of the project.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "assetIds": [ "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.

assetIds

A list that contains the IDs of each asset associated with the project.

Type: Array of strings

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListProjects

Retrieves a paginated list of projects for an AWS IoT SiteWise Monitor portal.

Request Syntax

```
GET /projects?maxResults=maxResults&nextToken=nextToken&portalId=portalId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of results to return for each paginated request.

Default: 50

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

portalId

The ID of the portal.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "nextToken": "string",
   "projectSummaries": [
      {
         "creationDate": number,
         "description": "string",
         "id": "string",
         "lastUpdateDate": number,
         "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 for the next set of results, or null if there are no additional results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

projectSummaries

A list that summarizes each project in the portal.

Type: Array of ProjectSummary objects

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

ListTagsForResource

Retrieves the list of tags for an AWS IoT SiteWise 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 1011.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "tags": {
      "string" : "string"
   }
}
```

Response Elements

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

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

tags

The list of key-value pairs that contain metadata for the resource. For more information, see Tagging your AWS IoT SiteWise resources in the *AWS IoT SiteWise User Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

UnauthorizedException

You are not authorized.

HTTP Status Code: 401

See Also

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

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

ListTimeSeries

Retrieves a paginated list of time series (data streams).

Request Syntax

```
GET /timeseries/?
aliasPrefix=aliasPrefix&assetId=assetId&maxResults=maxResults&nextToken=nextToken&timeSeriesTyp
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

aliasPrefix

The alias prefix of the time series.

Length Constraints: Minimum length of 1.

Pattern: `[^\u0000-\u001F\u007F]+`

assetId

The ID of the asset in which the asset property was created. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

maxResults

The maximum number of results to return for each paginated request.

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

nextToken

The token to be used for the next set of paginated results.

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

timeSeriesType

The type of the time series. The time series type can be one of the following values:

- `ASSOCIATED` – The time series is associated with an asset property.
- `DISASSOCIATED` – The time series isn't associated with any asset property.

Valid Values: `ASSOCIATED | DISASSOCIATED`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "nextToken": "string",
   "TimeSeriesSummaries": [
      {
         "alias": "string",
         "assetId": "string",
         "dataType": "string",
         "dataTypeSpec": "string",
         "propertyId": "string",
         "timeSeriesArn": "string",
         "timeSeriesCreationDate": number,
         "timeSeriesId": "string",
         "timeSeriesLastUpdateDate": number
      }
   ]
}
```

Response Elements

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

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

nextToken

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

Type: String

Length Constraints: Minimum length of 1. Maximum length of 4096.

Pattern: `[A-Za-z0-9+/=]+`

TimeSeriesSummaries

One or more time series summaries to list.

Type: Array of TimeSeriesSummary objects

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

PutAssetModelInterfaceRelationship

Creates or updates an interface relationship between an asset model and an interface asset model. This operation applies an interface to an asset model.

Request Syntax

```
PUT /asset-models/assetModelId/interface/interfaceAssetModelId/asset-model-interface-
relationship HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "propertyMappingConfiguration": {
      "createMissingProperty": boolean,
      "matchByPropertyName": boolean,
      "overrides": [
         {
            "assetModelPropertyId": "string",
            "interfaceAssetModelPropertyId": "string"
         }
      ]
   }
}
```

URI Request Parameters

The request uses the following URI parameters.

assetModelId

The ID of the asset model. This can be either the actual ID in UUID format, or else externalId: followed by the external ID.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

interfaceAssetModelId

The ID of the interface asset model. This can be either the actual ID in UUID format, or else externalId: followed by the external ID.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

propertyMappingConfiguration

The configuration for mapping properties from the interface asset model to the asset model where the interface is applied. This configuration controls how properties are matched and created during the interface application process.

Type: PropertyMappingConfiguration object

Required: Yes

Response Syntax

```
HTTP/1.1 202
```

```
Content-type: application/json

{
   "assetModelArn": "string",
   "assetModelId": "string",
   "assetModelStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "string"
   },
   "interfaceAssetModelId": "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.

assetModelArn

The ARN of the asset model, which has the following format. `arn:${Partition}:iotsitewise:${Region}:${Account}:asset-model/${AssetModelId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

assetModelId

The ID of the asset model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

assetModelStatus

Contains current status information for an asset model. For more information, see Asset and model states in the *AWS IoT SiteWise User Guide*.

Type: AssetModelStatus object

interfaceAssetModelId

The ID of the interface asset model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3

- AWS SDK for Python
- AWS SDK for Ruby V3

PutDefaultEncryptionConfiguration

Sets the default encryption configuration for the AWS account. For more information, see Key management in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
POST /configuration/account/encryption HTTP/1.1
Content-type: application/json

{
   "encryptionType": "string",
   "kmsKeyId": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

encryptionType

The type of encryption used for the encryption configuration.

Type: String

Valid Values: `SITEWISE_DEFAULT_ENCRYPTION | KMS_BASED_ENCRYPTION`

Required: Yes

kmsKeyId

The Key ID of the customer managed key used for AWS KMS encryption. This is required if you use `KMS_BASED_ENCRYPTION`.

Type: String

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

Required: No

Response Syntax

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

{
   "configurationStatus": {
      "error": {
         "code": "string",
         "message": "string"
      },
      "state": "string"
   },
   "encryptionType": "string",
   "kmsKeyArn": "string"
}
```

Response Elements

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

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

configurationStatus

The status of the account configuration. This contains the `ConfigurationState`. If there is an error, it also contains the `ErrorDetails`.

Type: ConfigurationStatus object

encryptionType

The type of encryption used for the encryption configuration.

Type: String

Valid Values: `SITEWISE_DEFAULT_ENCRYPTION | KMS_BASED_ENCRYPTION`

kmsKeyArn

The Key ARN of the AWS KMS key used for AWS KMS encryption if you use `KMS_BASED_ENCRYPTION`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

PutLoggingOptions

Sets logging options for AWS IoT SiteWise.

Request Syntax

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

{
   "loggingOptions": {
      "level": "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 logging options to set.

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.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

PutStorageConfiguration

Configures storage settings for AWS IoT SiteWise.

Request Syntax

```
POST /configuration/account/storage HTTP/1.1
Content-type: application/json

{
   "disallowIngestNullNaN": boolean,
   "disassociatedDataStorage": "string",
   "multiLayerStorage": {
      "customerManagedS3Storage": {
         "roleArn": "string",
         "s3ResourceArn": "string"
      }
   },
   "retentionPeriod": {
      "numberOfDays": number,
      "unlimited": boolean
   },
   "storageType": "string",
   "warmTier": "string",
   "warmTierRetentionPeriod": {
      "numberOfDays": number,
      "unlimited": boolean
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

disallowIngestNullNaN

Describes the configuration for ingesting NULL and NaN data. By default the feature is allowed. The feature is disallowed if the value is `true`.

Type: Boolean

Required: No

disassociatedDataStorage

Contains the storage configuration for time series (data streams) that aren't associated with asset properties. The `disassociatedDataStorage` can be one of the following values:

- `ENABLED` – AWS IoT SiteWise accepts time series that aren't associated with asset properties.

  > **Important**
  >
  > After the `disassociatedDataStorage` is enabled, you can't disable it.

- `DISABLED` – AWS IoT SiteWise doesn't accept time series (data streams) that aren't associated with asset properties.

For more information, see Data streams in the *AWS IoT SiteWise User Guide*.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

multiLayerStorage

Identifies a storage destination. If you specified `MULTI_LAYER_STORAGE` for the storage type, you must specify a `MultiLayerStorage` object.

Type: MultiLayerStorage object

Required: No

retentionPeriod

The number of days your data is kept in the hot tier. By default, your data is kept indefinitely in the hot tier.

Type: RetentionPeriod object

Required: No

storageType

The storage tier that you specified for your data. The `storageType` parameter can be one of the following values:

- `SITEWISE_DEFAULT_STORAGE` – AWS IoT SiteWise saves your data into the hot tier. The hot tier is a service-managed database.
- `MULTI_LAYER_STORAGE` – AWS IoT SiteWise saves your data in both the cold tier and the hot tier. The cold tier is a customer-managed Amazon S3 bucket.

Type: String

Valid Values: `SITEWISE_DEFAULT_STORAGE | MULTI_LAYER_STORAGE`

Required: Yes

warmTier

A service managed storage tier optimized for analytical queries. It stores periodically uploaded, buffered and historical data ingested with the CreaeBulkImportJob API.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

warmTierRetentionPeriod

Set this period to specify how long your data is stored in the warm tier before it is deleted. You can set this only if cold tier is enabled.

Type: WarmTierRetentionPeriod object

Required: No

Response Syntax

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

{
```

```
    "configurationStatus": {
       "error": {
          "code": "string",
          "message": "string"
       },
       "state": "string"
    },
    "disallowIngestNullNaN": boolean,
    "disassociatedDataStorage": "string",
    "multiLayerStorage": {
       "customerManagedS3Storage": {
          "roleArn": "string",
          "s3ResourceArn": "string"
       }
    },
    "retentionPeriod": {
       "numberOfDays": number,
       "unlimited": boolean
    },
    "storageType": "string",
    "warmTier": "string",
    "warmTierRetentionPeriod": {
       "numberOfDays": number,
       "unlimited": boolean
    }
}
```

Response Elements

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

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

configurationStatus

Contains current status information for the configuration.

Type: ConfigurationStatus object

disallowIngestNullNaN

Describes the configuration for ingesting NULL and NaN data. By default the feature is allowed. The feature is disallowed if the value is `true`.

Type: Boolean

disassociatedDataStorage

Contains the storage configuration for time series (data streams) that aren't associated with asset properties. The `disassociatedDataStorage` can be one of the following values:

- `ENABLED` – AWS IoT SiteWise accepts time series that aren't associated with asset properties.

  > **Important**
  >
  > After the `disassociatedDataStorage` is enabled, you can't disable it.

- `DISABLED` – AWS IoT SiteWise doesn't accept time series (data streams) that aren't associated with asset properties.

For more information, see Data streams in the *AWS IoT SiteWise User Guide*.

Type: String

Valid Values: `ENABLED | DISABLED`

multiLayerStorage

Contains information about the storage destination.

Type: MultiLayerStorage object

retentionPeriod

The number of days your data is kept in the hot tier. By default, your data is kept indefinitely in the hot tier.

Type: RetentionPeriod object

storageType

The storage tier that you specified for your data. The `storageType` parameter can be one of the following values:

- `SITEWISE_DEFAULT_STORAGE` – AWS IoT SiteWise saves your data into the hot tier. The hot tier is a service-managed database.
- `MULTI_LAYER_STORAGE` – AWS IoT SiteWise saves your data in both the cold tier and the hot tier. The cold tier is a customer-managed Amazon S3 bucket.

Type: String

Valid Values: `SITEWISE_DEFAULT_STORAGE | MULTI_LAYER_STORAGE`

warmTier

A service managed storage tier optimized for analytical queries. It stores periodically uploaded, buffered and historical data ingested with the CreaeBulkImportJob API.

Type: String

Valid Values: `ENABLED | DISABLED`

warmTierRetentionPeriod

Set this period to specify how long your data is stored in the warm tier before it is deleted. You can set this only if cold tier is enabled.

Type: WarmTierRetentionPeriod object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

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

TagResource

Adds tags to an AWS IoT SiteWise resource. If a tag already exists for the resource, this operation updates the tag's value.

Request Syntax

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

{
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The ARN of the resource to tag.

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

Request Body

The request accepts the following data in JSON format.

tags

A list of key-value pairs that contain metadata for the resource. For more information, see Tagging your AWS IoT SiteWise resources in the *AWS IoT SiteWise User Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

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.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

TooManyTagsException

You've reached the quota for the number of tags allowed for a resource. For more information, see Tag naming limits and requirements in the *AWS General Reference*.

HTTP Status Code: 400

UnauthorizedException

You are not authorized.

HTTP Status Code: 401

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

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

UntagResource

Removes a tag from an AWS IoT SiteWise 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 to untag.

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

tagKeys

A list of keys for tags to remove from the resource.

Array Members: Minimum number of 0 items. Maximum number of 200 items.

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.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

UnauthorizedException

You are not authorized.

HTTP Status Code: 401

See Also

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

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

UpdateAccessPolicy

Updates an existing access policy that specifies an identity's access to an AWS IoT SiteWise Monitor portal or project resource.

Request Syntax

```
PUT /access-policies/accessPolicyId HTTP/1.1
Content-type: application/json

{
   "accessPolicyIdentity": {
      "group": {
         "id": "string"
      },
      "iamRole": {
         "arn": "string"
      },
      "iamUser": {
         "arn": "string"
      },
      "user": {
         "id": "string"
      }
   },
   "accessPolicyPermission": "string",
   "accessPolicyResource": {
      "portal": {
         "id": "string"
      },
      "project": {
         "id": "string"
      }
   },
   "clientToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

accessPolicyId

The ID of the access policy.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

accessPolicyIdentity

The identity for this access policy. Choose an IAM Identity Center user, an IAM Identity Center group, or an IAM user.

Type: Identity object

Required: Yes

accessPolicyPermission

The permission level for this access policy. Note that a project `ADMINISTRATOR` is also known as a project owner.

Type: String

Valid Values: `ADMINISTRATOR | VIEWER`

Required: Yes

accessPolicyResource

The AWS IoT SiteWise Monitor resource for this access policy. Choose either a portal or a project.

Type: Resource object

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors.

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

UpdateAsset

Updates an asset's name. For more information, see Updating assets and models in the *AWS IoT SiteWise User Guide*.

Request Syntax

```
PUT /assets/assetId HTTP/1.1
Content-type: application/json

{
   "assetDescription": "string",
   "assetExternalId": "string",
   "assetName": "string",
   "clientToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the asset to update. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

assetDescription

A description for the asset.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

assetExternalId

An external ID to assign to the asset. The asset must not already have an external ID. The external ID must be unique within your AWS account. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

assetName

A friendly name for the asset.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

Response Syntax

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

{
   "assetStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "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.

assetStatus

The status of the asset, which contains a state (`UPDATING` after successfully calling this operation) and any error message.

Type: AssetStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

UpdateAssetModel

Updates an asset model and all of the assets that were created from the model. Each asset created from the model inherits the updated asset model's property and hierarchy definitions. For more information, see Updating assets and models in the *AWS IoT SiteWise User Guide*.

> **Important**
>
> If you remove a property from an asset model, AWS IoT SiteWise deletes all previous data for that property. You can't change the type or data type of an existing property.
> To replace an existing asset model property with a new one with the same `name`, do the following:
>
> 1. Submit an `UpdateAssetModel` request with the entire existing property removed.
> 2. Submit a second `UpdateAssetModel` request that includes the new property. The new asset property will have the same `name` as the previous one and AWS IoT SiteWise will generate a new unique `id`.

Request Syntax

```
PUT /asset-models/assetModelId HTTP/1.1
If-Match: ifMatch
If-None-Match: ifNoneMatch
Match-For-Version-Type: matchForVersionType
Content-type: application/json

{
   "assetModelCompositeModels": [
      {
         "description": "string",
         "externalId": "string",
         "id": "string",
         "name": "string",
         "properties": [
            {
               "dataType": "string",
               "dataTypeSpec": "string",
               "externalId": "string",
               "id": "string",
```

```
                "name": "string",
                "path": [
                   {
                      "id": "string",
                      "name": "string"
                   }
                ],
                "type": {
                   "attribute": {
                      "defaultValue": "string"
                   },
                   "measurement": {
                      "processingConfig": {
                         "forwardingConfig": {
                            "state": "string"
                         }
                      }
                   },
                   "metric": {
                      "expression": "string",
                      "processingConfig": {
                         "computeLocation": "string"
                      },
                      "variables": [
                         {
                            "name": "string",
                            "value": {
                               "hierarchyId": "string",
                               "propertyId": "string",
                               "propertyPath": [
                                  {
                                     "id": "string",
                                     "name": "string"
                                  }
                               ]
                            }
                         }
                      ],
                      "window": {
                         "tumbling": {
                            "interval": "string",
                            "offset": "string"
                         }
                      }
```

```
                    },
                    "transform": {
                       "expression": "string",
                       "processingConfig": {
                          "computeLocation": "string",
                          "forwardingConfig": {
                             "state": "string"
                          }
                       },
                       "variables": [
                          {
                             "name": "string",
                             "value": {
                                "hierarchyId": "string",
                                "propertyId": "string",
                                "propertyPath": [
                                   {
                                      "id": "string",
                                      "name": "string"
                                   }
                                ]
                             }
                          }
                       ]
                    }
                 },
                 "unit": "string"
              }
           ],
           "type": "string"
        }
     ],
     "assetModelDescription": "string",
     "assetModelExternalId": "string",
     "assetModelHierarchies": [
        {
           "childAssetModelId": "string",
           "externalId": "string",
           "id": "string",
           "name": "string"
        }
     ],
     "assetModelName": "string",
     "assetModelProperties": [
```

```
        {
           "dataType": "string",
           "dataTypeSpec": "string",
           "externalId": "string",
           "id": "string",
           "name": "string",
           "path": [
              {
                 "id": "string",
                 "name": "string"
              }
           ],
           "type": {
              "attribute": {
                 "defaultValue": "string"
              },
              "measurement": {
                 "processingConfig": {
                    "forwardingConfig": {
                       "state": "string"
                    }
                 }
              },
              "metric": {
                 "expression": "string",
                 "processingConfig": {
                    "computeLocation": "string"
                 },
                 "variables": [
                    {
                       "name": "string",
                       "value": {
                          "hierarchyId": "string",
                          "propertyId": "string",
                          "propertyPath": [
                             {
                                "id": "string",
                                "name": "string"
                             }
                          ]
                       }
                    }
                 ],
                 "window": {
```

```
                    "tumbling": {
                       "interval": "string",
                       "offset": "string"
                    }
                 }
              },
              "transform": {
                 "expression": "string",
                 "processingConfig": {
                    "computeLocation": "string",
                    "forwardingConfig": {
                       "state": "string"
                    }
                 },
                 "variables": [
                    {
                       "name": "string",
                       "value": {
                          "hierarchyId": "string",
                          "propertyId": "string",
                          "propertyPath": [
                             {
                                "id": "string",
                                "name": "string"
                             }
                          ]
                       }
                    }
                 ]
              }
           },
           "unit": "string"
        }
    ],
    "clientToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

assetModelId

The ID of the asset model to update. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

ifMatch

The expected current entity tag (ETag) for the asset model's latest or active version (specified using `matchForVersionType`). The update request is rejected if the tag does not match the latest or active version's current entity tag. See Optimistic locking for asset model writes in the *AWS IoT SiteWise User Guide*.

Pattern: `^[\w-]{43}$`

ifNoneMatch

Accepts ***** to reject the update request if an active version (specified using `matchForVersionType` as `ACTIVE`) already exists for the asset model.

Pattern: `\*`

matchForVersionType

Specifies the asset model version type (`LATEST` or `ACTIVE`) used in conjunction with `If-Match` or `If-None-Match` headers to determine the target ETag for the update operation.

Valid Values: `LATEST | ACTIVE`

Request Body

The request accepts the following data in JSON format.

assetModelCompositeModels

The composite models that are part of this asset model. It groups properties (such as attributes, measurements, transforms, and metrics) and child composite models that model parts of your industrial equipment. Each composite model has a type that defines the properties that the composite model supports. Use composite models to define alarms on this asset model.

> **Note**
>
> When creating custom composite models, you need to use CreateAssetModelCompositeModel. For more information, see Creating custom composite models (Components) in the *AWS IoT SiteWise User Guide*.

Type: Array of AssetModelCompositeModel objects

Required: No

assetModelDescription

A description for the asset model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

assetModelExternalId

An external ID to assign to the asset model. The asset model must not already have an external ID. The external ID must be unique within your AWS account. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

assetModelHierarchies

The updated hierarchy definitions of the asset model. Each hierarchy specifies an asset model whose assets can be children of any other assets created from this asset model. For more information, see Asset hierarchies in the *AWS IoT SiteWise User Guide*.

You can specify up to 10 hierarchies per asset model. For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: Array of AssetModelHierarchy objects

Required: No

assetModelName

A unique name for the asset model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

assetModelProperties

The updated property definitions of the asset model. For more information, see Asset properties in the *AWS IoT SiteWise User Guide*.

You can specify up to 200 properties per asset model. For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: Array of AssetModelProperty objects

Required: No

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

Response Syntax

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

{
   "assetModelStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "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.

assetModelStatus

The status of the asset model, which contains a state (`UPDATING` after successfully calling this operation) and any error message.

Type: AssetModelStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

PreconditionFailedException

The precondition in one or more of the request-header fields evaluated to `FALSE`.

HTTP Status Code: 412

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

UpdateAssetModelCompositeModel

Updates a composite model and all of the assets that were created from the model. Each asset created from the model inherits the updated asset model's property and hierarchy definitions. For more information, see Updating assets and models in the *AWS IoT SiteWise User Guide*.

> **Important**
>
> If you remove a property from a composite asset model, AWS IoT SiteWise deletes all previous data for that property. You can't change the type or data type of an existing property.
>
> To replace an existing composite asset model property with a new one with the same `name`, do the following:
>
> 1. Submit an `UpdateAssetModelCompositeModel` request with the entire existing property removed.
> 2. Submit a second `UpdateAssetModelCompositeModel` request that includes the new property. The new asset property will have the same `name` as the previous one and AWS IoT SiteWise will generate a new unique `id`.

Request Syntax

```
PUT /asset-models/assetModelId/composite-models/assetModelCompositeModelId HTTP/1.1
If-Match: ifMatch
If-None-Match: ifNoneMatch
Match-For-Version-Type: matchForVersionType
Content-type: application/json

{
   "assetModelCompositeModelDescription": "string",
   "assetModelCompositeModelExternalId": "string",
   "assetModelCompositeModelName": "string",
   "assetModelCompositeModelProperties": [
      {
         "dataType": "string",
         "dataTypeSpec": "string",
         "externalId": "string",
         "id": "string",
         "name": "string",
```

```
        "path": [
           {
              "id": "string",
              "name": "string"
           }
        ],
        "type": {
           "attribute": {
              "defaultValue": "string"
           },
           "measurement": {
              "processingConfig": {
                 "forwardingConfig": {
                    "state": "string"
                 }
              }
           },
           "metric": {
              "expression": "string",
              "processingConfig": {
                 "computeLocation": "string"
              },
              "variables": [
                 {
                    "name": "string",
                    "value": {
                       "hierarchyId": "string",
                       "propertyId": "string",
                       "propertyPath": [
                          {
                             "id": "string",
                             "name": "string"
                          }
                       ]
                    }
                 }
              ],
              "window": {
                 "tumbling": {
                    "interval": "string",
                    "offset": "string"
                 }
              }
           },
```

```
            "transform": {
               "expression": "string",
               "processingConfig": {
                  "computeLocation": "string",
                  "forwardingConfig": {
                     "state": "string"
                  }
               },
               "variables": [
                  {
                     "name": "string",
                     "value": {
                        "hierarchyId": "string",
                        "propertyId": "string",
                        "propertyPath": [
                           {
                              "id": "string",
                              "name": "string"
                           }
                        ]
                     }
                  }
               ]
            }
         },
         "unit": "string"
      }
   ],
   "clientToken": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

assetModelCompositeModelId

The ID of a composite model on this asset model.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

assetModelId

The ID of the asset model, in UUID format.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

ifMatch

The expected current entity tag (ETag) for the asset model's latest or active version (specified using `matchForVersionType`). The update request is rejected if the tag does not match the latest or active version's current entity tag. See Optimistic locking for asset model writes in the *AWS IoT SiteWise User Guide*.

Pattern: `^[\w-]{43}$`

ifNoneMatch

Accepts * to reject the update request if an active version (specified using `matchForVersionType` as `ACTIVE`) already exists for the asset model.

Pattern: `\*`

matchForVersionType

Specifies the asset model version type (`LATEST` or `ACTIVE`) used in conjunction with `If-Match` or `If-None-Match` headers to determine the target ETag for the update operation.

Valid Values: `LATEST | ACTIVE`

Request Body

The request accepts the following data in JSON format.

assetModelCompositeModelDescription

A description for the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

assetModelCompositeModelExternalId

An external ID to assign to the asset model. You can only set the external ID of the asset model if it wasn't set when it was created, or you're setting it to the exact same thing as when it was created.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

assetModelCompositeModelName

A unique name for the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

assetModelCompositeModelProperties

The property definitions of the composite model. For more information, see Inline custom composite models in the *AWS IoT SiteWise User Guide*.

You can specify up to 200 properties per composite model. For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: Array of AssetModelProperty objects

Required: No

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

Response Syntax

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

{
   "assetModelCompositeModelPath": [
      {
         "id": "string",
         "name": "string"
      }
   ],
   "assetModelStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "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.

assetModelCompositeModelPath

The path to the composite model listing the parent composite models.

Type: Array of AssetModelCompositeModelPathSegment objects

assetModelStatus

Contains current status information for an asset model. For more information, see Asset and model states in the *AWS IoT SiteWise User Guide*.

Type: AssetModelStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

PreconditionFailedException

The precondition in one or more of the request-header fields evaluated to FALSE.

HTTP Status Code: 412

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UpdateAssetProperty

Updates an asset property's alias and notification state.

> **Important**
>
> This operation overwrites the property's existing alias and notification state. To keep your existing property's alias or notification state, you must include the existing values in the UpdateAssetProperty request. For more information, see DescribeAssetProperty.

Request Syntax

```
PUT /assets/assetId/properties/propertyId HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "propertyAlias": "string",
   "propertyNotificationState": "string",
   "propertyUnit": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

assetId

The ID of the asset to be updated. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

propertyId

The ID of the asset property to be updated. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

propertyAlias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

If you omit this parameter, the alias is removed from the property.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000.

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

propertyNotificationState

The MQTT notification state (enabled or disabled) for this asset property. When the notification state is enabled, AWS IoT SiteWise publishes property value updates to a unique MQTT topic. For more information, see Interacting with other services in the *AWS IoT SiteWise User Guide*.

If you omit this parameter, the notification state is set to `DISABLED`.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

propertyUnit

The unit of measure (such as Newtons or RPM) of the asset property. If you don't specify a value for this parameter, the service uses the value of the `assetModelProperty` in the asset model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UpdateComputationModel

Updates the computation model.

Request Syntax

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

{
   "clientToken": "string",
   "computationModelConfiguration": {
      "anomalyDetection": {
         "inputProperties": "string",
         "resultProperty": "string"
      }
   },
   "computationModelDataBinding": {
      "string" : {
         "assetModelProperty": {
            "assetModelId": "string",
            "propertyId": "string"
         },
         "assetProperty": {
            "assetId": "string",
            "propertyId": "string"
         },
         "list": [
            "ComputationModelDataBindingValue"
         ]
      }
   },
   "computationModelDescription": "string",
   "computationModelName": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

computationModelId

The ID of the computation model.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

computationModelConfiguration

The configuration for the computation model.

Type: ComputationModelConfiguration object

Required: Yes

computationModelDataBinding

The data binding for the computation model. Key is a variable name defined in configuration. Value is a `ComputationModelDataBindingValue` referenced by the variable.

Type: String to ComputationModelDataBindingValue object map

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

Key Pattern: `^[a-z][a-z0-9_]*$`

Required: Yes

computationModelDescription

The description of the computation model.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: No

computationModelName

The name of the computation model.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: Yes

Response Syntax

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

{
   "computationModelStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
```

```
            "message": "string"
        },
        "state": "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.

computationModelStatus

The status of the computation model. It contains a state (UPDATING after successfully calling this operation) and an error message if any.

Type: ComputationModelStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceAlreadyExistsException

The resource already exists.

HTTP Status Code: 409

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2

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

UpdateDashboard

Updates an AWS IoT SiteWise Monitor dashboard.

Request Syntax

```
PUT /dashboards/dashboardId HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "dashboardDefinition": "string",
   "dashboardDescription": "string",
   "dashboardName": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

dashboardId

The ID of the dashboard to update.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

dashboardDefinition

The new dashboard definition, as specified in a JSON literal.

- AWS IoT SiteWise Monitor (Classic) see Create dashboards (AWS CLI)
- AWS IoT SiteWise Monitor (AI-aware) see Create dashboards (AWS CLI)

in the *AWS IoT SiteWise User Guide*

Type: String

Length Constraints: Minimum length of 0. Maximum length of 204800.

Pattern: `.+`

Required: Yes

dashboardDescription

A new description for the dashboard.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

dashboardName

A new friendly name for the dashboard.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

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

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

UpdateDataset

Updates a dataset.

Request Syntax

```
PUT /datasets/datasetId HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "datasetDescription": "string",
   "datasetName": "string",
   "datasetSource": {
      "sourceDetail": {
         "kendra": {
            "knowledgeBaseArn": "string",
            "roleArn": "string"
         }
      },
      "sourceFormat": "string",
      "sourceType": "string"
   }
}
```

URI Request Parameters

The request uses the following URI parameters.

datasetId

The ID of the dataset.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

datasetDescription

A description about the dataset, and its functionality.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: No

datasetName

The name of the dataset.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: Yes

datasetSource

The data source for the dataset.

Type: DatasetSource object

Required: Yes

Response Syntax

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

{
   "datasetArn": "string",
   "datasetId": "string",
   "datasetStatus": {
      "error": {
         "code": "string",
         "details": [
            {
               "code": "string",
               "message": "string"
            }
         ],
         "message": "string"
      },
      "state": "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.

datasetArn

The ARN of the dataset. The format is `arn:${Partition}:iotsitewise:${Region}:${Account}:dataset/${DatasetId}`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

datasetId

The ID of the dataset.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

datasetStatus

The status of the dataset. This contains the state and any error messages. State is `UPDATING` after a successfull call to this API, and any associated error message. The state is `ACTIVE` when ready to use.

Type: DatasetStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python

- AWS SDK for Ruby V3

UpdateGateway

Updates a gateway's name.

Request Syntax

```
PUT /20200301/gateways/gatewayId HTTP/1.1
Content-type: application/json

{
   "gatewayName": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

gatewayId

The ID of the gateway to update.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

gatewayName

A unique name for the gateway.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

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.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

UpdateGatewayCapabilityConfiguration

Updates a gateway capability configuration or defines a new capability configuration. Each gateway capability defines data sources for a gateway.

Important workflow notes:

Each gateway capability defines data sources for a gateway. This is the namespace of the gateway capability.

. The namespace follows the format `service:capability:version`, where:

- `service` - The service providing the capability, or `iotsitewise`.
- `capability` - The specific capability type. Options include: `opcuacollector` for the OPC UA data source collector, or `publisher` for data publisher capability.
- `version` - The version number of the capability. Option include 2 for Classic streams, V2 gateways, and 3 for MQTT-enabled, V3 gateways.

After updating a capability configuration, the sync status becomes `OUT_OF_SYNC` until the gateway processes the configuration.Use `DescribeGatewayCapabilityConfiguration` to check the sync status and verify the configuration was applied.

A gateway can have multiple capability configurations with different namespaces.

Request Syntax

```
POST /20200301/gateways/gatewayId/capability HTTP/1.1
Content-type: application/json

{
   "capabilityConfiguration": "string",
   "capabilityNamespace": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

gatewayId

The ID of the gateway to be updated.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

capabilityConfiguration

The JSON document that defines the configuration for the gateway capability. For more information, see Configuring data sources (CLI) in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10000000.

Required: Yes

capabilityNamespace

The namespace of the gateway capability configuration to be updated. For example, if you configure OPC UA sources for an MQTT-enabled gateway, your OPC-UA capability configuration has the namespace `iotsitewise:opcuacollector:3`.

Type: String

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

Pattern: `^[a-zA-Z]+:[a-zA-Z]+:[0-9]+$`

Required: Yes

Response Syntax

```
HTTP/1.1 201
```

```
Content-type: application/json

{
   "capabilityNamespace": "string",
   "capabilitySyncStatus": "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.

capabilityNamespace

The namespace of the gateway capability.

Type: String

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

Pattern: `^[a-zA-Z]+:[a-zA-Z]+:[0-9]+$`

capabilitySyncStatus

The synchronization status of the gateway capability configuration. The sync status can be one of the following:

- `IN_SYNC` - The gateway is running with the latest configuration.
- `OUT_OF_SYNC` - The gateway hasn't received the latest configuration.
- `SYNC_FAILED` - The gateway rejected the latest configuration.
- `UNKNOWN` - The gateway hasn't reported its sync status.
- `NOT_APPLICABLE` - The gateway doesn't support this capability. This is most common when integrating partner data sources, because the data integration is handled externally by the partner.

After you update a capability configuration, its sync status is `OUT_OF_SYNC` until the gateway receives and applies or rejects the updated configuration.

Type: String

Valid Values: `IN_SYNC | OUT_OF_SYNC | SYNC_FAILED | UNKNOWN | NOT_APPLICABLE`

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

LimitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 410

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

UpdatePortal

Updates an AWS IoT SiteWise Monitor portal.

Request Syntax

```
PUT /portals/portalId HTTP/1.1
Content-type: application/json

{
   "alarms": {
      "alarmRoleArn": "string",
      "notificationLambdaArn": "string"
   },
   "clientToken": "string",
   "notificationSenderEmail": "string",
   "portalContactEmail": "string",
   "portalDescription": "string",
   "portalLogoImage": {
      "file": {
         "data": blob,
         "type": "string"
      },
      "id": "string"
   },
   "portalName": "string",
   "portalType": "string",
   "portalTypeConfiguration": {
      "string" : {
         "portalTools": [ "string" ]
      }
   },
   "roleArn": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

portalId

The ID of the portal to update.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

alarms

Contains the configuration information of an alarm created in an AWS IoT SiteWise Monitor portal. You can use the alarm to monitor an asset property and get notified when the asset property value is outside a specified range. For more information, see Monitoring with alarms in the *AWS IoT SiteWise Application Guide*.

Type: Alarms object

Required: No

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

notificationSenderEmail

The email address that sends alarm notifications.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[a-zA-Z0-9_\-\.\+]+@[a-zA-Z0-9_\-\.\+]+\.[a-zA-Z]{2,}$`

Required: No

portalContactEmail

The AWS administrator's contact email address.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[a-zA-Z0-9_\-\.\+]+@[a-zA-Z0-9_\-\.\+]+\.[a-zA-Z]{2,}$`

Required: Yes

portalDescription

A new description for the portal.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

portalLogoImage

Contains an image that is one of the following:

- An image file. Choose this option to upload a new image.
- The ID of an existing image. Choose this option to keep an existing image.

Type: Image object

Required: No

portalName

A new friendly name for the portal.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

portalType

Define the type of portal. The value for AWS IoT SiteWise Monitor (Classic) is `SITEWISE_PORTAL_V1`. The value for AWS IoT SiteWise Monitor (AI-aware) is `SITEWISE_PORTAL_V2`.

Type: String

Valid Values: `SITEWISE_PORTAL_V1 | SITEWISE_PORTAL_V2`

Required: No

portalTypeConfiguration

The configuration entry associated with the specific portal type. The value for AWS IoT SiteWise Monitor (Classic) is `SITEWISE_PORTAL_V1`. The value for AWS IoT SiteWise Monitor (AI-aware) is `SITEWISE_PORTAL_V2`.

Type: String to PortalTypeEntry object map

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

Required: No

roleArn

The ARN of a service role that allows the portal's users to access your AWS IoT SiteWise resources on your behalf. For more information, see Using service roles for AWS IoT SiteWise Monitor in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.\+=,@]+$`

Required: Yes

Response Syntax

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

{
```

```
    "portalStatus": {
       "error": {
          "code": "string",
          "message": "string"
       },
       "state": "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.

portalStatus

The status of the portal, which contains a state (`UPDATING` after successfully calling this operation) and any error message.

Type: PortalStatus object

Errors

For information about the errors that are common to all actions, see Common Errors.

ConflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

HTTP Status Code: 409

InternalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

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

UpdateProject

Updates an AWS IoT SiteWise Monitor project.

Request Syntax

```
PUT /projects/projectId HTTP/1.1
Content-type: application/json

{
   "clientToken": "string",
   "projectDescription": "string",
   "projectName": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

projectId

The ID of the project to update.

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientToken

A unique case-sensitive identifier that you can provide to ensure the idempotency of the request. Don't reuse this client token if a new idempotent request is required.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 64.

Pattern: `\S{36,64}`

Required: No

projectDescription

A new description for the project.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

projectName

A new friendly name for the project.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

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

AWS IoT SiteWise can't process your request right now. Try again later.

HTTP Status Code: 500

InvalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

HTTP Status Code: 400

ResourceNotFoundException

The requested resource can't be found.

HTTP Status Code: 404

ThrottlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

HTTP Status Code: 429

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

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

Data Types

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

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

The following data types are supported:

- AccessPolicySummary
- ActionDefinition
- ActionPayload
- ActionSummary
- AggregatedValue
- Aggregates
- Alarms
- AssetBindingValueFilter
- AssetCompositeModel
- AssetCompositeModelPathSegment
- AssetCompositeModelSummary
- AssetErrorDetails
- AssetHierarchy
- AssetHierarchyInfo
- AssetModelBindingValueFilter
- AssetModelCompositeModel
- AssetModelCompositeModelDefinition
- AssetModelCompositeModelPathSegment
- AssetModelCompositeModelSummary
- AssetModelHierarchy

- AssetModelHierarchyDefinition
- AssetModelProperty
- AssetModelPropertyBindingValue
- AssetModelPropertyBindingValueFilter
- AssetModelPropertyDefinition
- AssetModelPropertyPathSegment
- AssetModelPropertySummary
- AssetModelStatus
- AssetModelSummary
- AssetProperty
- AssetPropertyBindingValue
- AssetPropertyBindingValueFilter
- AssetPropertyPathSegment
- AssetPropertySummary
- AssetPropertyValue
- AssetRelationshipSummary
- AssetStatus
- AssetSummary
- AssociatedAssetsSummary
- Attribute
- BatchGetAssetPropertyAggregatesEntry
- BatchGetAssetPropertyAggregatesErrorEntry
- BatchGetAssetPropertyAggregatesErrorInfo
- BatchGetAssetPropertyAggregatesSkippedEntry
- BatchGetAssetPropertyAggregatesSuccessEntry
- BatchGetAssetPropertyValueEntry
- BatchGetAssetPropertyValueErrorEntry
- BatchGetAssetPropertyValueErrorInfo
- BatchGetAssetPropertyValueHistoryEntry
- BatchGetAssetPropertyValueHistoryErrorEntry

- BatchGetAssetPropertyValueHistoryErrorInfo
- BatchGetAssetPropertyValueHistorySkippedEntry
- BatchGetAssetPropertyValueHistorySuccessEntry
- BatchGetAssetPropertyValueSkippedEntry
- BatchGetAssetPropertyValueSuccessEntry
- BatchPutAssetPropertyError
- BatchPutAssetPropertyErrorEntry
- Citation
- ColumnInfo
- ColumnType
- CompositeModelProperty
- CompositionDetails
- CompositionRelationshipItem
- CompositionRelationshipSummary
- ComputationModelAnomalyDetectionConfiguration
- ComputationModelConfiguration
- ComputationModelDataBindingUsageSummary
- ComputationModelDataBindingValue
- ComputationModelResolveToResourceSummary
- ComputationModelStatus
- ComputationModelSummary
- ConfigurationErrorDetails
- ConfigurationStatus
- Content
- Csv
- CustomerManagedS3Storage
- DashboardSummary
- DataBindingValue
- DataBindingValueFilter
- DataSetReference

- DatasetSource
- DatasetStatus
- DatasetSummary
- Datum
- DetailedError
- ErrorDetails
- ErrorReportLocation
- ExecutionStatus
- ExecutionSummary
- ExpressionVariable
- File
- FileFormat
- ForwardingConfig
- GatewayCapabilitySummary
- GatewayPlatform
- GatewaySummary
- Greengrass
- GreengrassV2
- GroupIdentity
- HierarchyMapping
- IAMRoleIdentity
- IAMUserIdentity
- Identity
- Image
- ImageFile
- ImageLocation
- InterfaceRelationship
- InterfaceRelationshipSummary
- InterfaceSummary
- InterpolatedAssetPropertyValue

- InvocationOutput
- JobConfiguration
- JobSummary
- KendraSourceDetail
- Location
- LoggingOptions
- MatchedDataBinding
- Measurement
- MeasurementProcessingConfig
- Metric
- MetricProcessingConfig
- MetricWindow
- MonitorErrorDetails
- MultiLayerStorage
- Parquet
- PortalResource
- PortalStatus
- PortalSummary
- PortalTypeEntry
- ProjectResource
- ProjectSummary
- Property
- PropertyMapping
- PropertyMappingConfiguration
- PropertyNotification
- PropertyType
- PropertyValueNullValue
- PutAssetPropertyValueEntry
- Reference
- ResolveTo

- Resource
- ResponseStream
- RetentionPeriod
- Row
- SiemensIE
- Source
- SourceDetail
- TargetResource
- TimeInNanos
- TimeSeriesSummary
- Trace
- Transform
- TransformProcessingConfig
- TumblingWindow
- UserIdentity
- VariableValue
- Variant
- WarmTierRetentionPeriod

AccessPolicySummary

Contains an access policy that defines an identity's access to an AWS IoT SiteWise Monitor resource.

Contents

id

The ID of the access policy.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

identity

The identity (an IAM Identity Center user, an IAM Identity Center group, or an IAM user).

Type: Identity object

Required: Yes

permission

The permissions for the access policy. Note that a project `ADMINISTRATOR` is also known as a project owner.

Type: String

Valid Values: `ADMINISTRATOR | VIEWER`

Required: Yes

resource

The AWS IoT SiteWise Monitor resource (a portal or project).

Type: Resource object

Required: Yes

creationDate

The date the access policy was created, in Unix epoch time.

Type: Timestamp

Required: No

lastUpdateDate

The date the access policy was last updated, in Unix epoch time.

Type: Timestamp

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ActionDefinition

Contains a definition for an action.

Contents

actionDefinitionId

The ID of the action definition.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

actionName

The name of the action definition.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

actionType

The type of the action definition.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ActionPayload

The JSON payload of the action.

Contents

stringValue

The payload of the action in a JSON string.

Type: String

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ActionSummary

Contains the summary of the actions, including information about where the action resolves to.

Contents

actionDefinitionId

The ID of the action definition.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

actionId

The ID of the action.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

resolveTo

The detailed resource this action resolves to.

Type: ResolveTo object

Required: No

targetResource

The resource the action will be taken on.

Type: TargetResource object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AggregatedValue

Contains aggregated asset property values (for example, average, minimum, and maximum).

Contents

timestamp

The date the aggregating computations occurred, in Unix epoch time.

Type: Timestamp

Required: Yes

value

The value of the aggregates.

Type: Aggregates object

Required: Yes

quality

The quality of the aggregated data.

Type: String

Valid Values: `GOOD | BAD | UNCERTAIN`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Aggregates

Contains the (pre-calculated) aggregate values for an asset property.

Contents

average

The average (mean) value of the time series over a time interval window.

Type: Double

Required: No

count

The count of data points in the time series over a time interval window.

Type: Double

Required: No

maximum

The maximum value of the time series over a time interval window.

Type: Double

Required: No

minimum

The minimum value of the time series over a time interval window.

Type: Double

Required: No

standardDeviation

The standard deviation of the time series over a time interval window.

Type: Double

Required: No

sum

The sum of the time series over a time interval window.

Type: Double

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Alarms

Contains the configuration information of an alarm created in an AWS IoT SiteWise Monitor portal. You can use the alarm to monitor an asset property and get notified when the asset property value is outside a specified range. For more information, see Monitoring with alarms in the *AWS IoT SiteWise Application Guide*.

Contents

alarmRoleArn

The ARN of the IAM role that allows the alarm to perform actions and access AWS resources and services, such as AWS IoT Events.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.\+=,@]+$`

Required: Yes

notificationLambdaArn

The ARN of the Lambda function that manages alarm notifications. For more information, see Managing alarm notifications in the *AWS IoT Events Developer Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: No

See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetBindingValueFilter

A filter used to match data bindings based on a specific asset. This filter identifies all computation models referencing a particular asset in their data bindings.

Contents

assetId

The ID of the asset to filter data bindings by. Only data bindings referencing this specific asset are matched.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetCompositeModel

Contains information about a composite model in an asset. This object contains the asset's properties that you define in the composite model.

Contents

name

The name of the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

properties

The asset properties that this composite model defines.

Type: Array of AssetProperty objects

Required: Yes

type

The type of the composite model. For alarm composite models, this type is `AWS/ALARM`.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

description

The description of the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

externalId

The external ID of the asset composite model. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

id

The ID of the asset composite model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetCompositeModelPathSegment

Represents one level between a composite model and the root of the asset.

Contents

id

The ID of the path segment.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

name

The name of the path segment.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetCompositeModelSummary

Contains a summary of the composite model for a specific asset.

Contents

description

A description of the composite model that this summary describes.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

id

The ID of the composite model that this summary describes.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

name

The name of the composite model that this summary describes.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

path

The path that includes all the components of the asset model for the asset.

Type: Array of AssetCompositeModelPathSegment objects

Required: Yes

type

The type of asset model.

- **ASSET_MODEL** – (default) An asset model that you can use to create assets. Can't be included as a component in another asset model.
- **COMPONENT_MODEL** – A reusable component that you can include in the composite models of other asset models. You can't create assets directly from this type of asset model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

externalId

An external ID to assign to the asset model.

If the composite model is a derived composite model, or one nested inside a component model, you can only set the external ID using `UpdateAssetModelCompositeModel` and specifying the derived ID of the model or property from the created model it's a part of.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetErrorDetails

Contains error details for the requested associate project asset action.

Contents

assetId

The ID of the asset, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

code

The error code.

Type: String

Valid Values: `INTERNAL_FAILURE`

Required: Yes

message

The error message.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetHierarchy

Describes an asset hierarchy that contains a hierarchy's name and ID.

Contents

name

The hierarchy name provided in the CreateAssetModel or UpdateAssetModel API operation.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

externalId

The external ID of the hierarchy, if it has one. When you update an asset hierarchy, you may assign an external ID if it doesn't already have one. You can't change the external ID of an asset hierarchy that already has one. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

id

The ID of the hierarchy. This ID is a `hierarchyId`.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetHierarchyInfo

Contains information about a parent asset and a child asset that are related through an asset hierarchy.

Contents

childAssetId

The ID of the child asset in this asset relationship.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

parentAssetId

The ID of the parent asset in this asset relationship.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelBindingValueFilter

A filter used to match data bindings based on a specific asset model. This filter identifies all computation models referencing a particular asset model in their data bindings.

Contents

assetModelId

The ID of the asset model to filter data bindings by. Only data bindings referemncing this specific asset model are matched.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelCompositeModel

Contains information about a composite model in an asset model. This object contains the asset property definitions that you define in the composite model.

Contents

name

The name of the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

type

The type of the composite model. For alarm composite models, this type is `AWS/ALARM`.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

description

The description of the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

externalId

The external ID of the asset model composite model. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

id

The ID of the asset model composite model.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

properties

The asset property definitions for this composite model.

Type: Array of AssetModelProperty objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

AssetModelCompositeModelDefinition

Contains a composite model definition in an asset model. This composite model definition is applied to all assets created from the asset model.

Contents

name

The name of the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

type

The type of the composite model. For alarm composite models, this type is `AWS/ALARM`.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

description

The description of the composite model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

externalId

An external ID to assign to the composite model. The external ID must be unique among composite models within this asset model. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

id

The ID to assign to the composite model, if desired. AWS IoT SiteWise automatically generates a unique ID for you, so this parameter is never required. However, if you prefer to supply your own ID instead, you can specify it here in UUID format. If you specify your own ID, it must be globally unique.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

properties

The asset property definitions for this composite model.

Type: Array of AssetModelPropertyDefinition objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelCompositeModelPathSegment

Represents one level between a composite model and the root of the asset model.

Contents

id

The ID of the path segment.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

name

The name of the path segment.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelCompositeModelSummary

Contains a summary of the composite model.

Contents

id

The ID of the composite model that this summary describes..

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

name

The name of the composite model that this summary describes..

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

type

The composite model type. Valid values are `AWS/ALARM`, `CUSTOM`, or `AWS/L4E_ANOMALY`.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

description

The description of the composite model that this summary describes..

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

externalId

The external ID of a composite model on this asset model. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

path

The path that includes all the pieces that make up the composite model.

Type: Array of AssetModelCompositeModelPathSegment objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelHierarchy

Describes an asset hierarchy that contains a hierarchy's name, ID, and child asset model ID that specifies the type of asset that can be in this hierarchy.

Contents

childAssetModelId

The ID of the asset model, in UUID format. All assets in this hierarchy must be instances of the `childAssetModelId` asset model. AWS IoT SiteWise will always return the actual asset model ID for this value. However, when you are specifying this value as part of a call to UpdateAssetModel, you may provide either the asset model ID or else `externalId:` followed by the asset model's external ID. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

name

The name of the asset model hierarchy that you specify by using the CreateAssetModel or UpdateAssetModel API operation.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

externalId

The external ID (if any) provided in the CreateAssetModel or UpdateAssetModel operation. You can assign an external ID by specifying this value as part of a call to UpdateAssetModel.

However, you can't change the external ID if one is already assigned. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

id

The ID of the asset model hierarchy. This ID is a `hierarchyId`.

- If you are callling UpdateAssetModel to create a *new* hierarchy: You can specify its ID here, if desired. AWS IoT SiteWise automatically generates a unique ID for you, so this parameter is never required. However, if you prefer to supply your own ID instead, you can specify it here in UUID format. If you specify your own ID, it must be globally unique.
- If you are calling UpdateAssetModel to modify an *existing* hierarchy: This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

AssetModelHierarchyDefinition

Contains an asset model hierarchy used in asset model creation. An asset model hierarchy determines the kind (or type) of asset that can belong to a hierarchy.

Contents

childAssetModelId

The ID of an asset model for this hierarchy. This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

name

The name of the asset model hierarchy definition (as specified in the CreateAssetModel or UpdateAssetModel API operation).

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

externalId

An external ID to assign to the asset model hierarchy. The external ID must be unique among asset model hierarchies within this asset model. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

id

The ID to assign to the asset model hierarchy, if desired. AWS IoT SiteWise automatically generates a unique ID for you, so this parameter is never required. However, if you prefer to supply your own ID instead, you can specify it here in UUID format. If you specify your own ID, it must be globally unique.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelProperty

Contains information about an asset model property.

Contents

dataType

The data type of the asset model property.

If you specify `STRUCT`, you must also specify `dataTypeSpec` to identify the type of the structure for this property.

Type: String

Valid Values: `STRING | INTEGER | DOUBLE | BOOLEAN | STRUCT`

Required: Yes

name

The name of the asset model property.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

type

The property type (see `PropertyType`).

Type: PropertyType object

Required: Yes

dataTypeSpec

The data type of the structure for this property. This parameter exists on properties that have the `STRUCT` data type.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

externalId

The external ID (if any) provided in the CreateAssetModel or UpdateAssetModel operation. You can assign an external ID by specifying this value as part of a call to UpdateAssetModel. However, you can't change the external ID if one is already assigned. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

id

The ID of the asset model property.

- If you are callling UpdateAssetModel to create a *new* property: You can specify its ID here, if desired. AWS IoT SiteWise automatically generates a unique ID for you, so this parameter is never required. However, if you prefer to supply your own ID instead, you can specify it here in UUID format. If you specify your own ID, it must be globally unique.
- If you are calling UpdateAssetModel to modify an *existing* property: This can be either the actual ID in UUID format, or else `externalId:` followed by the external ID, if it has one. For more information, see Referencing objects with external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

path

The structured path to the property from the root of the asset model.

Type: Array of AssetModelPropertyPathSegment objects

Required: No

unit

The unit of the asset model property, such as `Newtons` or `RPM`.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelPropertyBindingValue

Contains information about an `assetModelProperty` binding value.

Contents

assetModelId

The ID of the asset model, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

propertyId

The ID of the asset model property used in data binding value.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelPropertyBindingValueFilter

A filter used to match data bindings based on a specific asset model property. This filter identifies all computation models that reference a particular property of an asset model in their data bindings.

Contents

assetModelId

The ID of the asset model containing the filter property. This identifies the specific asset model that contains the property of interest.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

propertyId

The ID of the property within the asset model to filter by. Only data bindings referencing this specific property of the specified asset model are matched.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelPropertyDefinition

Contains an asset model property definition. This property definition is applied to all assets created from the asset model.

Contents

dataType

The data type of the property definition.

If you specify `STRUCT`, you must also specify `dataTypeSpec` to identify the type of the structure for this property.

Type: String

Valid Values: `STRING | INTEGER | DOUBLE | BOOLEAN | STRUCT`

Required: Yes

name

The name of the property definition.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

type

The property definition type (see `PropertyType`). You can only specify one type in a property definition.

Type: PropertyType object

Required: Yes

dataTypeSpec

The data type of the structure for this property. This parameter is required on properties that have the `STRUCT` data type.

The options for this parameter depend on the type of the composite model in which you define this property. Use `AWS/ALARM_STATE` for alarm state in alarm composite models.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

externalId

An external ID to assign to the property definition. The external ID must be unique among property definitions within this asset model. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

id

The ID to assign to the asset model property, if desired. AWS IoT SiteWise automatically generates a unique ID for you, so this parameter is never required. However, if you prefer to supply your own ID instead, you can specify it here in UUID format. If you specify your own ID, it must be globally unique.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

unit

The unit of the property definition, such as `Newtons` or `RPM`.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelPropertyPathSegment

Represents one level between a property and the root of the asset model.

Contents

id

The ID of the path segment.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

name

The name of the path segment.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelPropertySummary

Contains a summary of a property associated with a model. This includes information about which interfaces the property belongs to, if any.

Contents

dataType

The data type of the property.

Type: String

Valid Values: `STRING | INTEGER | DOUBLE | BOOLEAN | STRUCT`

Required: Yes

name

The name of the property.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

type

Contains a property type, which can be one of `attribute`, `measurement`, `metric`, or `transform`.

Type: PropertyType object

Required: Yes

assetModelCompositeModelId

The ID of the composite model that contains the asset model property.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

dataTypeSpec

The data type of the structure for this property. This parameter exists on properties that have the `STRUCT` data type.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

externalId

The external ID of the property. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

id

The ID of the property.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

interfaceSummaries

A list of interface summaries that describe which interfaces this property belongs to, including the interface asset model ID and the corresponding property ID in the interface.

Type: Array of InterfaceSummary objects

Required: No

path

The structured path to the property from the root of the asset model.

Type: Array of AssetModelPropertyPathSegment objects

Required: No

unit

The unit (such as `Newtons` or `RPM`) of the property.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelStatus

Contains current status information for an asset model. For more information, see Asset and model states in the *AWS IoT SiteWise User Guide*.

Contents

state

The current state of the asset model.

Type: String

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

Required: Yes

error

Contains associated error information, if any.

Type: ErrorDetails object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetModelSummary

Contains a summary of an asset model.

Contents

arn

The ARN of the asset model, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:asset-model/${AssetModelId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

creationDate

The date the asset model was created, in Unix epoch time.

Type: Timestamp

Required: Yes

description

The asset model description.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

id

The ID of the asset model (used with AWS IoT SiteWise API operations).

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

lastUpdateDate

The date the asset model was last updated, in Unix epoch time.

Type: Timestamp

Required: Yes

name

The name of the asset model.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

status

The current status of the asset model.

Type: AssetModelStatus object

Required: Yes

assetModelType

The type of asset model.

- **ASSET_MODEL** – (default) An asset model that you can use to create assets. Can't be included as a component in another asset model.
- **COMPONENT_MODEL** – A reusable component that you can include in the composite models of other asset models. You can't create assets directly from this type of asset model.

Type: String

Valid Values: `ASSET_MODEL | COMPONENT_MODEL | INTERFACE`

Required: No

externalId

The external ID of the asset model. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

version

The version number of the asset model.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10.

Pattern: `^(0|([1-9]{1}\d*))$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetProperty

Contains asset property information.

Contents

dataType

The data type of the asset property.

Type: String

Valid Values: `STRING | INTEGER | DOUBLE | BOOLEAN | STRUCT`

Required: Yes

id

The ID of the asset property.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

name

The name of the property.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

alias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000.

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

dataTypeSpec

The data type of the structure for this property. This parameter exists on properties that have the `STRUCT` data type.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

externalId

The external ID of the asset property. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

notification

The asset property's notification topic and state. For more information, see UpdateAssetProperty.

Type: PropertyNotification object

Required: No

path

The structured path to the property from the root of the asset.

Type: Array of AssetPropertyPathSegment objects

Required: No

unit

The unit (such as `Newtons` or `RPM`) of the asset property.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetPropertyBindingValue

Represents a data binding value referencing a specific asset property. It's used to bind computation model variables to actual asset property values for processing.

Contents

assetId

The ID of the asset containing the property. This identifies the specific asset instance's property value used in the computation model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

propertyId

The ID of the property within the asset. This identifies the specific property's value used in the computation model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetPropertyBindingValueFilter

A filter used to match data bindings based on a specific asset property. This filter helps identify all computation models referencing a particular property of an asset in their data bindings.

Contents

assetId

The ID of the asset containing the property to filter by. This identifies the specific asset instance containing the property of interest.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

propertyId

The ID of the property within the asset to filter by. Only data bindings referencing this specific property of the specified asset are matched.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetPropertyPathSegment

Represents one level between a property and the root of the asset.

Contents

id

The ID of the path segment.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

name

The name of the path segment.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetPropertySummary

Contains a summary of a property associated with an asset.

Contents

id

The ID of the property.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

alias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 1.

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

assetCompositeModelId

The ID of the composite model that contains the asset property.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

externalId

The external ID of the property. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

notification

Contains asset property value notification information. When the notification state is enabled, AWS IoT SiteWise publishes property value updates to a unique MQTT topic. For more information, see Interacting with other services in the *AWS IoT SiteWise User Guide*.

Type: PropertyNotification object

Required: No

path

The structured path to the property from the root of the asset.

Type: Array of AssetPropertyPathSegment objects

Required: No

unit

The unit of measure (such as Newtons or RPM) of the asset property.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetPropertyValue

Contains asset property value information.

Contents

timestamp

The timestamp of the asset property value.

Type: TimeInNanos object

Required: Yes

value

The value of the asset property (see `Variant`).

Type: Variant object

Required: Yes

quality

The quality of the asset property value.

Type: String

Valid Values: `GOOD | BAD | UNCERTAIN`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetRelationshipSummary

Contains information about assets that are related to one another.

Contents

relationshipType

The relationship type of the assets in this relationship. This value is one of the following:

- `HIERARCHY` – The assets are related through an asset hierarchy. If you specify this relationship type, this asset relationship includes the `hierarchyInfo` object.

Type: String

Valid Values: `HIERARCHY`

Required: Yes

hierarchyInfo

The assets that are related through an asset hierarchy.

This object is present if the `relationshipType` is `HIERARCHY`.

Type: AssetHierarchyInfo object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetStatus

Contains information about the current status of an asset. For more information, see Asset and model states in the *AWS IoT SiteWise User Guide*.

Contents

state

The current status of the asset.

Type: String

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

Required: Yes

error

Contains associated error information, if any.

Type: ErrorDetails object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssetSummary

Contains a summary of an asset.

Contents

arn

The ARN of the asset, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:asset/${AssetId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

assetModelId

The ID of the asset model used to create this asset.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

creationDate

The date the asset was created, in Unix epoch time.

Type: Timestamp

Required: Yes

hierarchies

A list of asset hierarchies that each contain a `hierarchyId`. A hierarchy specifies allowed parent/child asset relationships.

Type: Array of AssetHierarchy objects

Required: Yes

id

The ID of the asset, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

lastUpdateDate

The date the asset was last updated, in Unix epoch time.

Type: Timestamp

Required: Yes

name

The name of the asset.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

status

The current status of the asset.

Type: AssetStatus object

Required: Yes

description

A description for the asset.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

externalId

The external ID of the asset. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AssociatedAssetsSummary

Contains a summary of an associated asset.

Contents

arn

The ARN of the asset, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:asset/${AssetId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

assetModelId

The ID of the asset model used to create the asset.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

creationDate

The date the asset was created, in Unix epoch time.

Type: Timestamp

Required: Yes

hierarchies

A list of asset hierarchies that each contain a `hierarchyId`. A hierarchy specifies allowed parent/child asset relationships.

Type: Array of AssetHierarchy objects

Required: Yes

id

The ID of the asset, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

lastUpdateDate

The date the asset was last updated, in Unix epoch time.

Type: Timestamp

Required: Yes

name

The name of the asset.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

status

The current status of the asset.

Type: AssetStatus object

Required: Yes

description

A description for the asset.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

externalId

The external ID of the asset. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Attribute

Contains an asset attribute property. For more information, see Attributes in the *AWS IoT SiteWise User Guide*.

Contents

defaultValue

The default value of the asset model property attribute. All assets that you create from the asset model contain this attribute value. You can update an attribute's value after you create an asset. For more information, see Updating attribute values in the *AWS IoT SiteWise User Guide*.

Type: String

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyAggregatesEntry

Contains information for an asset property aggregate entry that is associated with the BatchGetAssetPropertyAggregates API.

To identify an asset property, you must specify one of the following:

- The `assetId` and `propertyId` of an asset property.
- A `propertyAlias`, which is a data stream alias (for example, `/company/windfarm/3/turbine/7/temperature`). To define an asset property's alias, see UpdateAssetProperty.

Contents

aggregateTypes

The data aggregating function.

Type: Array of strings

Array Members: Minimum number of 1 item.

Valid Values: `AVERAGE | COUNT | MAXIMUM | MINIMUM | SUM | STANDARD_DEVIATION`

Required: Yes

endDate

The inclusive end of the range from which to query historical data, expressed in seconds in Unix epoch time.

Type: Timestamp

Required: Yes

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

resolution

The time interval over which to aggregate data.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 3.

Pattern: `1m|15m|1h|1d`

Required: Yes

startDate

The exclusive start of the range from which to query historical data, expressed in seconds in Unix epoch time.

Type: Timestamp

Required: Yes

assetId

The ID of the asset in which the asset property was created.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

propertyAlias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

propertyId

The ID of the asset property, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

qualities

The quality by which to filter asset data.

Type: Array of strings

Array Members: Fixed number of 1 item.

Valid Values: `GOOD | BAD | UNCERTAIN`

Required: No

timeOrdering

The chronological sorting order of the requested information.

Default: `ASCENDING`

Type: String

Valid Values: `ASCENDING | DESCENDING`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyAggregatesErrorEntry

Contains error information for an asset property aggregate entry that is associated with the BatchGetAssetPropertyAggregates API.

Contents

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

errorCode

The error code.

Type: String

Valid Values: `ResourceNotFoundException | InvalidRequestException | AccessDeniedException`

Required: Yes

errorMessage

The associated error message.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyAggregatesErrorInfo

Contains the error code and the timestamp for an asset property aggregate entry that is associated with the BatchGetAssetPropertyAggregates API.

Contents

errorCode

The error code.

Type: String

Valid Values: `ResourceNotFoundException | InvalidRequestException | AccessDeniedException`

Required: Yes

errorTimestamp

The date the error occurred, in Unix epoch time.

Type: Timestamp

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyAggregatesSkippedEntry

Contains information for an entry that has been processed by the previous BatchGetAssetPropertyAggregates request.

Contents

completionStatus

The completion status of each entry that is associated with the BatchGetAssetPropertyAggregates API.

Type: String

Valid Values: `SUCCESS | ERROR`

Required: Yes

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

errorInfo

The error information, such as the error code and the timestamp.

Type: BatchGetAssetPropertyAggregatesErrorInfo object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyAggregatesSuccessEntry

Contains success information for an entry that is associated with the BatchGetAssetPropertyAggregates API.

Contents

aggregatedValues

The requested aggregated asset property values (for example, average, minimum, and maximum).

Type: Array of AggregatedValue objects

Required: Yes

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyValueEntry

Contains information for an asset property value entry that is associated with the BatchGetAssetPropertyValue API.

To identify an asset property, you must specify one of the following:

- The `assetId` and `propertyId` of an asset property.
- A `propertyAlias`, which is a data stream alias (for example, `/company/windfarm/3/turbine/7/temperature`). To define an asset property's alias, see UpdateAssetProperty.

Contents

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

assetId

The ID of the asset in which the asset property was created.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

propertyAlias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

propertyId

The ID of the asset property, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyValueErrorEntry

Contains error information for an asset property value entry that is associated with the BatchGetAssetPropertyValue API.

Contents

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

errorCode

The error code.

Type: String

Valid Values: `ResourceNotFoundException | InvalidRequestException | AccessDeniedException`

Required: Yes

errorMessage

The associated error message.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyValueErrorInfo

The error information, such as the error code and the timestamp.

Contents

errorCode

The error code.

Type: String

Valid Values: `ResourceNotFoundException | InvalidRequestException | AccessDeniedException`

Required: Yes

errorTimestamp

The date the error occurred, in Unix epoch time.

Type: Timestamp

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyValueHistoryEntry

Contains information for an asset property historical value entry that is associated with the BatchGetAssetPropertyValueHistory API.

To identify an asset property, you must specify one of the following:

- The `assetId` and `propertyId` of an asset property.
- A `propertyAlias`, which is a data stream alias (for example, `/company/windfarm/3/turbine/7/temperature`). To define an asset property's alias, see UpdateAssetProperty.

Contents

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

assetId

The ID of the asset in which the asset property was created.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

endDate

The inclusive end of the range from which to query historical data, expressed in seconds in Unix epoch time.

Type: Timestamp

Required: No

propertyAlias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

propertyId

The ID of the asset property, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

qualities

The quality by which to filter asset data.

Type: Array of strings

Array Members: Fixed number of 1 item.

Valid Values: `GOOD | BAD | UNCERTAIN`

Required: No

startDate

The exclusive start of the range from which to query historical data, expressed in seconds in Unix epoch time.

Type: Timestamp

Required: No

timeOrdering

The chronological sorting order of the requested information.

Default: `ASCENDING`

Type: String

Valid Values: `ASCENDING | DESCENDING`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyValueHistoryErrorEntry

A list of the errors (if any) associated with the batch request. Each error entry contains the `entryId` of the entry that failed.

Contents

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

errorCode

The error code.

Type: String

Valid Values: `ResourceNotFoundException | InvalidRequestException | AccessDeniedException`

Required: Yes

errorMessage

The associated error message.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyValueHistoryErrorInfo

The error information, such as the error code and the timestamp.

Contents

errorCode

The error code.

Type: String

Valid Values: `ResourceNotFoundException | InvalidRequestException | AccessDeniedException`

Required: Yes

errorTimestamp

The date the error occurred, in Unix epoch time.

Type: Timestamp

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyValueHistorySkippedEntry

Contains information for an entry that has been processed by the previous BatchGetAssetPropertyValueHistory request.

Contents

completionStatus

The completion status of each entry that is associated with the BatchGetAssetPropertyValueHistory API.

Type: String

Valid Values: `SUCCESS | ERROR`

Required: Yes

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

errorInfo

The error information, such as the error code and the timestamp.

Type: BatchGetAssetPropertyValueHistoryErrorInfo object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyValueHistorySuccessEntry

Contains success information for an entry that is associated with the BatchGetAssetPropertyValueHistory API.

Contents

assetPropertyValueHistory

The requested historical values for the specified asset property.

Type: Array of AssetPropertyValue objects

Required: Yes

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyValueSkippedEntry

Contains information for an entry that has been processed by the previous BatchGetAssetPropertyValue request.

Contents

completionStatus

The completion status of each entry that is associated with the BatchGetAssetPropertyValue request.

Type: String

Valid Values: `SUCCESS | ERROR`

Required: Yes

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

errorInfo

The error information, such as the error code and the timestamp.

Type: BatchGetAssetPropertyValueErrorInfo object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchGetAssetPropertyValueSuccessEntry

Contains success information for an entry that is associated with the BatchGetAssetPropertyValue API.

Contents

entryId

The ID of the entry.

Type: String

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

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

Required: Yes

assetPropertyValue

Contains asset property value information.

Type: AssetPropertyValue object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchPutAssetPropertyError

Contains error information from updating a batch of asset property values.

Contents

errorCode

The error code.

Type: String

Valid Values: `ResourceNotFoundException | InvalidRequestException | InternalFailureException | ServiceUnavailableException | ThrottlingException | LimitExceededException | ConflictingOperationException | TimestampOutOfRangeException | AccessDeniedException`

Required: Yes

errorMessage

The associated error message.

Type: String

Required: Yes

timestamps

A list of timestamps for each error, if any.

Type: Array of TimeInNanos objects

Required: Yes

See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

BatchPutAssetPropertyErrorEntry

Contains error information for asset property value entries that are associated with the BatchPutAssetPropertyValue API.

Contents

entryId

The ID of the failed entry.

Type: String

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

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

Required: Yes

errors

The list of update property value errors.

Type: Array of BatchPutAssetPropertyError objects

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Citation

Contains text content to which the SiteWise Assistant refers to, and generate the final response. It also contains information about the source.

Contents

content

Contains the cited text from the data source.

Type: Content object

Required: No

reference

Contains information about the data source.

Type: Reference object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ColumnInfo

A description of the column in the query results.

Contents

name

The name of the column description.

Type: String

Required: No

type

The type of the column description.

Type: ColumnType object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ColumnType

The data type of the column.

Contents

scalarType

The allowed data types that the column has as it's value.

Type: String

Valid Values: `BOOLEAN | INT | DOUBLE | TIMESTAMP | STRING`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CompositeModelProperty

Contains information about a composite model property on an asset.

Contents

assetProperty

Contains asset property information.

Type: Property object

Required: Yes

name

The name of the property.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

type

The type of the composite model that defines this property.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

externalId

The external ID of the composite model that contains the property. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

id

The ID of the composite model that contains the property.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CompositionDetails

Metadata for the composition relationship established by using `composedAssetModelId` in `CreateAssetModelCompositeModel`.

Contents

compositionRelationship

An array detailing the composition relationship for this composite model.

Type: Array of CompositionRelationshipItem objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CompositionRelationshipItem

Represents a composite model that composed an asset model of type `COMPONENT_MODEL`.

Contents

id

The ID of the component.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CompositionRelationshipSummary

Contains a summary of the components of the composite model.

Contents

assetModelCompositeModelId

The ID of a composite model on this asset model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

assetModelCompositeModelType

The composite model type. Valid values are `AWS/ALARM`, `CUSTOM`, or `AWS/L4E_ANOMALY`.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

assetModelId

The ID of the asset model, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ComputationModelAnomalyDetectionConfiguration

Contains the configuration of the type of anomaly detection computation model.

Contents

inputProperties

Define the variable name associated with input properties, with the following format `${VariableName}`.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 67.

Pattern: `^\$\{[a-z][a-z0-9_]*\}`

Required: Yes

resultProperty

Define the variable name associated with the result property, and the following format `${VariableName}`.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 67.

Pattern: `^\$\{[a-z][a-z0-9_]*\}`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ComputationModelConfiguration

The configuration for the computation model.

Contents

anomalyDetection

The configuration for the anomaly detection type of computation model.

Type: ComputationModelAnomalyDetectionConfiguration object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ComputationModelDataBindingUsageSummary

A summary of how a specific data binding is used across computation models. This tracks dependencies between data sources and computation models, allowing you to understand the impact of changes to data sources.

Contents

computationModelIds

The list of computation model IDs that use this data binding. This allows identification of all computation models affected by changes to the referenced data source.

Type: Array of strings

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

matchedDataBinding

The data binding matched by the filter criteria. Contains details about specific data binding values used by the computation models.

Type: MatchedDataBinding object

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ComputationModelDataBindingValue

Contains computation model data binding value information, which can be one of `assetModelProperty`, `list`.

Contents

assetModelProperty

Specifies an asset model property data binding value.

Type: AssetModelPropertyBindingValue object

Required: No

assetProperty

The asset property value used for computation model data binding.

Type: AssetPropertyBindingValue object

Required: No

list

Specifies a list of data binding value.

Type: Array of ComputationModelDataBindingValue objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ComputationModelResolveToResourceSummary

A summary of the resource that a computation model resolves to.

Contents

resolveTo

The detailed resource this execution summary resolves to.

Type: ResolveTo object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ComputationModelStatus

Contains current status information for a computation model.

Contents

state

The current state of the computation model.

Type: String

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

Required: Yes

error

Contains the details of an AWS IoT SiteWise error.

Type: ErrorDetails object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ComputationModelSummary

Contains a summary of a computation model.

Contents

arn

The ARN of the computation model, which has the following format.

`arn:${Partition}:iotsitewise:${Region}:${Account}:computation-model/${ComputationModelId}`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

creationDate

The model creation date, in Unix epoch time.

Type: Timestamp

Required: Yes

id

The ID of the computation model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

lastUpdateDate

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

Type: Timestamp

Required: Yes

name

The name of the computation model.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: Yes

status

The current status of the computation model.

Type: ComputationModelStatus object

Required: Yes

type

The type of the computation model.

Type: String

Valid Values: `ANOMALY_DETECTION`

Required: Yes

version

The version of the computation model.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10.

Pattern: `^(0|([1-9]{1}\d*))$`

Required: Yes

description

The description of the computation model.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ConfigurationErrorDetails

Contains the details of an AWS IoT SiteWise configuration error.

Contents

code

The error code.

Type: String

Valid Values: `VALIDATION_ERROR | INTERNAL_FAILURE`

Required: Yes

message

The error message.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ConfigurationStatus

Contains current status information for the configuration.

Contents

state

The current state of the configuration.

Type: String

Valid Values: `ACTIVE | UPDATE_IN_PROGRESS | UPDATE_FAILED`

Required: Yes

error

Contains associated error information, if any.

Type: ConfigurationErrorDetails object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Content

Contains the cited text from the data source.

Contents

text

The cited text from the data source.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Csv

A .CSV file.

Contents

columnNames

The column names specified in the .csv file.

Type: Array of strings

Valid Values: `ALIAS | ASSET_ID | PROPERTY_ID | DATA_TYPE | TIMESTAMP_SECONDS | TIMESTAMP_NANO_OFFSET | QUALITY | VALUE`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

CustomerManagedS3Storage

Contains information about a customer managed Amazon S3 bucket.

Contents

roleArn

The ARN of the AWS Identity and Access Management role that allows AWS IoT SiteWise to send data to Amazon S3.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

s3ResourceArn

The ARN of the Amazon S3 object. For more information about how to find the ARN for an Amazon S3 object, see Amazon S3 resources in the *Amazon Simple Storage Service User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

DashboardSummary

Contains a dashboard summary.

Contents

id

The ID of the dashboard.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

name

The name of the dashboard

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

creationDate

The date the dashboard was created, in Unix epoch time.

Type: Timestamp

Required: No

description

The dashboard's description.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

lastUpdateDate

The date the dashboard was last updated, in Unix epoch time.

Type: Timestamp

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

DataBindingValue

Represents a value used in a data binding. It can be an asset property or an asset model property.

Contents

assetModelProperty

Contains information about an `assetModelProperty` binding value.

Type: AssetModelPropertyBindingValue object

Required: No

assetProperty

The asset property value used in the data binding.

Type: AssetPropertyBindingValue object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

DataBindingValueFilter

A filter used to match specific data binding values based on criteria. This filter allows searching for data bindings by asset, asset model, asset property, or asset model property.

Contents

asset

Filter criteria for matching data bindings based on a specific asset. Used to list all data bindings referencing a particular asset or its properties.

Type: AssetBindingValueFilter object

Required: No

assetModel

Filter criteria for matching data bindings based on a specific asset model. Used to list all data bindings referencing a particular asset model or its properties.

Type: AssetModelBindingValueFilter object

Required: No

assetModelProperty

Filter criteria for matching data bindings based on a specific asset model property. Used to list all data bindings referencing a particular property of an asset model.

Type: AssetModelPropertyBindingValueFilter object

Required: No

assetProperty

Filter criteria for matching data bindings based on a specific asset property. Used to list all data bindings referencing a particular property of an asset.

Type: AssetPropertyBindingValueFilter object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

DataSetReference

Contains information about the dataset use and it's source.

Contents

datasetArn

The ARN of the dataset. The format is `arn:${Partition}:iotsitewise:${Region}:${Account}:dataset/${DatasetId}`.

Type: String

Required: No

source

The data source for the dataset.

Type: Source object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

DatasetSource

The data source for the dataset.

Contents

sourceFormat

The format of the dataset source associated with the dataset.

Type: String

Valid Values: `KNOWLEDGE_BASE`

Required: Yes

sourceType

The type of data source for the dataset.

Type: String

Valid Values: `KENDRA`

Required: Yes

sourceDetail

The details of the dataset source associated with the dataset.

Type: SourceDetail object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

DatasetStatus

The status of the dataset. This contains the state and any error messages. The state is `ACTIVE` when ready to use.

Contents

state

The current status of the dataset.

Type: String

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

Required: Yes

error

Contains the details of an AWS IoT SiteWise error.

Type: ErrorDetails object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

DatasetSummary

The summary details for the dataset.

Contents

arn

The ARN of the dataset. The format is `arn:${Partition}:iotsitewise:${Region}:${Account}:dataset/${DatasetId}`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

creationDate

The dataset creation date, in Unix epoch time.

Type: Timestamp

Required: Yes

description

A description about the dataset, and its functionality.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: Yes

id

The ID of the dataset.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

lastUpdateDate

The date the dataset was last updated, in Unix epoch time.

Type: Timestamp

Required: Yes

name

The name of the dataset.

Type: String

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

Pattern: `^[a-zA-Z0-9 _\-#$*!@]+$`

Required: Yes

status

The status of the dataset. This contains the state and any error messages. The state is `ACTIVE` when ready to use.

Type: DatasetStatus object

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

Datum

Represents a single data point in a query result.

Contents

arrayValue

Indicates if the data point is an array.

Type: Array of Datum objects

Required: No

nullValue

Indicates if the data point is null.

Type: Boolean

Required: No

rowValue

Indicates if the data point is a row.

Type: Row object

Required: No

scalarValue

Indicates if the data point is a scalar value such as integer, string, double, or Boolean.

Type: String

Required: No

See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

DetailedError

Contains detailed error information.

Contents

code

The error code.

Type: String

Valid Values: `INCOMPATIBLE_COMPUTE_LOCATION` | `INCOMPATIBLE_FORWARDING_CONFIGURATION`

Required: Yes

message

The error message.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ErrorDetails

Contains the details of an AWS IoT SiteWise error.

Contents

code

The error code.

Type: String

Valid Values: `VALIDATION_ERROR | INTERNAL_FAILURE`

Required: Yes

message

The error message.

Type: String

Required: Yes

details

A list of detailed errors.

Type: Array of DetailedError objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ErrorReportLocation

The Amazon S3 destination where errors associated with the job creation request are saved.

Contents

bucket

The name of the Amazon S3 bucket to which errors associated with the bulk import job are sent.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Required: Yes

prefix

Amazon S3 uses the prefix as a folder name to organize data in the bucket. Each Amazon S3 object has a key that is its unique identifier in the bucket. Each object in a bucket has exactly one key. The prefix must end with a forward slash (/). For more information, see Organizing objects using prefixes in the *Amazon Simple Storage Service User Guide*.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExecutionStatus

The status of the execution.

Contents

state

The current state of the computation model.

Type: String

Valid Values: `RUNNING | COMPLETED | FAILED`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExecutionSummary

Contains the execution summary of the computation model.

Contents

executionId

The ID of the execution.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

executionStartTime

The time the process started.

Type: Timestamp

Required: Yes

executionStatus

The status of the execution process.

Type: ExecutionStatus object

Required: Yes

targetResource

The resource the action will be taken on. This can include asset-based resources and computation model resources.

Type: TargetResource object

Required: Yes

targetResourceVersion

The version of the target resource.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10.

Pattern: `^(0|([1-9]{1}\d*))$`

Required: Yes

actionType

The type of action exectued.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

executionEndTime

The time the process ended.

Type: Timestamp

Required: No

executionEntityVersion

The execution entity version associated with the summary.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10.

Pattern: `^(0|([1-9]{1}\d*))$`

Required: No

resolveTo

The detailed resource this execution resolves to.

Type: ResolveTo object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ExpressionVariable

Contains expression variable information.

Contents

name

The friendly name of the variable to be used in the expression.

Type: String

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

Pattern: `^[a-z][a-z0-9_]*$`

Required: Yes

value

The variable that identifies an asset property from which to use values.

Type: VariableValue object

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

File

The file in Amazon S3 where your data is saved.

Contents

bucket

The name of the Amazon S3 bucket from which data is imported.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Required: Yes

key

The key of the Amazon S3 object that contains your data. Each object has a key that is a unique identifier. Each object has exactly one key.

Type: String

Required: Yes

versionId

The version ID to identify a specific version of the Amazon S3 object that contains your data.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

FileFormat

The file format of the data in S3.

Contents

csv

The file is in .CSV format.

Type: Csv object

Required: No

parquet

The file is in parquet format.

Type: Parquet object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ForwardingConfig

The forwarding configuration for a given property.

Contents

state

The forwarding state for the given property.

Type: String

Valid Values: `DISABLED | ENABLED`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

GatewayCapabilitySummary

Contains a summary of a gateway capability configuration.

Contents

capabilityNamespace

The namespace of the capability configuration. For example, if you configure OPC UA sources for an MQTT-enabled gateway, your OPC-UA capability configuration has the namespace `iotsitewise:opcuacollector:3`.

Type: String

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

Pattern: `^[a-zA-Z]+:[a-zA-Z]+:[0-9]+$`

Required: Yes

capabilitySyncStatus

The synchronization status of the gateway capability configuration. The sync status can be one of the following:

- `IN_SYNC` - The gateway is running with the latest configuration.
- `OUT_OF_SYNC` - The gateway hasn't received the latest configuration.
- `SYNC_FAILED` - The gateway rejected the latest configuration.
- `UNKNOWN` - The gateway hasn't reported its sync status.
- `NOT_APPLICABLE` - The gateway doesn't support this capability. This is most common when integrating partner data sources, because the data integration is handled externally by the partner.

Type: String

Valid Values: `IN_SYNC | OUT_OF_SYNC | SYNC_FAILED | UNKNOWN | NOT_APPLICABLE`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

GatewayPlatform

The gateway's platform configuration. You can only specify one platform type in a gateway.

(Legacy only) For Greengrass V1 gateways, specify the `greengrass` parameter with a valid Greengrass group ARN.

For Greengrass V2 gateways, specify the `greengrassV2` parameter with a valid core device thing name. If creating a V3 gateway (`gatewayVersion=3`), you must also specify the `coreDeviceOperatingSystem`.

For Siemens Industrial Edge gateways, specify the `siemensIE` parameter with a valid IoT Core thing name.

Contents

greengrass

A gateway that runs on AWS IoT Greengrass.

Type: Greengrass object

Required: No

greengrassV2

A gateway that runs on AWS IoT Greengrass V2.

Type: GreengrassV2 object

Required: No

siemensIE

A SiteWise Edge gateway that runs on a Siemens Industrial Edge Device.

Type: SiemensIE object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

GatewaySummary

Contains a summary of a gateway.

Contents

creationDate

The date the gateway was created, in Unix epoch time.

Type: Timestamp

Required: Yes

gatewayId

The ID of the gateway device.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

gatewayName

The name of the gateway.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

lastUpdateDate

The date the gateway was last updated, in Unix epoch time.

Type: Timestamp

Required: Yes

gatewayCapabilitySummaries

A list of gateway capability summaries that each contain a namespace and status. Each gateway capability defines data sources for the gateway. To retrieve a capability configuration's definition, use DescribeGatewayCapabilityConfiguration.

Type: Array of GatewayCapabilitySummary objects

Required: No

gatewayPlatform

The gateway's platform configuration. You can only specify one platform type in a gateway.

(Legacy only) For Greengrass V1 gateways, specify the `greengrass` parameter with a valid Greengrass group ARN.

For Greengrass V2 gateways, specify the `greengrassV2` parameter with a valid core device thing name. If creating a V3 gateway (`gatewayVersion=3`), you must also specify the `coreDeviceOperatingSystem`.

For Siemens Industrial Edge gateways, specify the `siemensIE` parameter with a valid IoT Core thing name.

Type: GatewayPlatform object

Required: No

gatewayVersion

The version of the gateway. A value of 3 indicates an MQTT-enabled, V3 gateway, while 2 indicates a Classic streams, V2 gateway.

Type: String

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

Pattern: `^[0-9]+$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Greengrass

Contains details for a gateway that runs on AWS IoT Greengrass. To create a gateway that runs on AWS IoT Greengrass, you must add the IoT SiteWise connector to a Greengrass group and deploy it. Your Greengrass group must also have permissions to upload data to AWS IoT SiteWise. For more information, see Ingesting data using a gateway in the *AWS IoT SiteWise User Guide*.

Contents

groupArn

The ARN of the Greengrass group. For more information about how to find a group's ARN, see ListGroups and GetGroup in the *AWS IoT Greengrass V1 API Reference*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

GreengrassV2

Contains details for a gateway that runs on AWS IoT Greengrass V2. To create a gateway that runs on AWS IoT Greengrass V2, you must deploy the IoT SiteWise Edge component to your gateway device. Your Greengrass device role must use the `AWSIoTSiteWiseEdgeAccess` policy. For more information, see Using AWS IoT SiteWise at the edge in the *AWS IoT SiteWise User Guide*.

Contents

coreDeviceThingName

The name of the AWS IoT thing for your AWS IoT Greengrass V2 core device.

Type: String

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

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

Required: Yes

coreDeviceOperatingSystem

The operating system of the core device in AWS IoT Greengrass V2. Specifying the operating system is required for MQTT-enabled, V3 gateways (`gatewayVersion` 3) and not applicable for Classic stream, V2 gateways (`gatewayVersion` 2).

Type: String

Valid Values: `LINUX_AARCH64` | `LINUX_AMD64` | `WINDOWS_AMD64`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

GroupIdentity

Contains information for a group identity in an access policy.

Contents

id

The IAM Identity Center ID of the group.

Type: String

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

Pattern: \S+

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

HierarchyMapping

Maps a hierarchy from an interface asset model to a hierarchy in the asset model where the interface is applied.

Contents

assetModelHierarchyId

The ID of the hierarchy in the asset model where the interface is applied.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

interfaceAssetModelHierarchyId

The ID of the hierarchy in the interface asset model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

IAMRoleIdentity

Contains information about an AWS Identity and Access Management role. For more information, see IAM roles in the *IAM User Guide*.

Contents

arn

The ARN of the IAM role. For more information, see IAM ARNs in the *IAM User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.\+=,@]+$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

IAMUserIdentity

Contains information about an AWS Identity and Access Management user.

Contents

arn

The ARN of the IAM user. For more information, see IAM ARNs in the *IAM User Guide*.

> **Note**
>
> If you delete the IAM user, access policies that contain this identity include an empty `arn`. You can delete the access policy for the IAM user that no longer exists.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.\+=,@]+$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Identity

Contains an identity that can access an AWS IoT SiteWise Monitor resource.

> **Note**
>
> Currently, you can't use AWS API operations to retrieve IAM Identity Center identity IDs. You can find the IAM Identity Center identity IDs in the URL of user and group pages in the IAM Identity Center console.

Contents

group

An IAM Identity Center group identity.

Type: GroupIdentity object

Required: No

iamRole

An IAM role identity.

Type: IAMRoleIdentity object

Required: No

iamUser

An IAM user identity.

Type: IAMUserIdentity object

Required: No

user

An IAM Identity Center user identity.

Type: UserIdentity object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Image

Contains an image that is one of the following:

- An image file. Choose this option to upload a new image.
- The ID of an existing image. Choose this option to keep an existing image.

Contents

file

Contains an image file.

Type: ImageFile object

Required: No

id

The ID of an existing image. Specify this parameter to keep an existing image.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ImageFile

Contains an image file.

Contents

data

The image file contents, represented as a base64-encoded string. The file size must be less than 1 MB.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1. Maximum length of 1500000.

Required: Yes

type

The file type of the image.

Type: String

Valid Values: PNG

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ImageLocation

Contains an image that is uploaded to AWS IoT SiteWise and available at a URL.

Contents

id

The ID of the image.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

url

The URL where the image is available. The URL is valid for 15 minutes so that you can view and download the image

Type: String

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

Pattern: `^(http|https)\://\S+`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

InterfaceRelationship

Contains information about the relationship between an asset model and an interface asset model that is applied to it.

Contents

id

The ID of the asset model that has the interface applied to it.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

InterfaceRelationshipSummary

Contains summary information about an interface relationship, which defines how an interface is applied to an asset model. This summary provides the essential identifiers needed to retrieve detailed information about the relationship.

Contents

id

The ID of the asset model that has the interface applied to it.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

InterfaceSummary

Contains summary information about an interface that a property belongs to.

Contents

interfaceAssetModelId

The ID of the interface asset model that contains this property.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

interfaceAssetModelPropertyId

The ID of the property in the interface asset model that corresponds to this property.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

InterpolatedAssetPropertyValue

Contains information about an interpolated asset property value.

Contents

timestamp

Contains a timestamp with optional nanosecond granularity.

Type: TimeInNanos object

Required: Yes

value

Contains an asset property value (of a single type only).

Type: Variant object

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

InvocationOutput

This contains the SiteWise Assistant's response and the corresponding citation.

Contents

citations

A list of citations, and related information for the SiteWise Assistant's response.

Type: Array of Citation objects

Required: No

message

The text message of the SiteWise Assistant's response.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

JobConfiguration

Contains the configuration information of a job, such as the file format used to save data in Amazon S3.

Contents

fileFormat

The file format of the data in S3.

Type: FileFormat object

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

JobSummary

Contains the job summary information.

Contents

id

The ID of the job.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

name

The unique name that helps identify the job request.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

status

The status of the bulk import job can be one of following values:

- `PENDING` – AWS IoT SiteWise is waiting for the current bulk import job to finish.
- `CANCELLED` – The bulk import job has been canceled.
- `RUNNING` – AWS IoT SiteWise is processing your request to import your data from Amazon S3.
- `COMPLETED` – AWS IoT SiteWise successfully completed your request to import data from Amazon S3.
- `FAILED` – AWS IoT SiteWise couldn't process your request to import data from Amazon S3. You can use logs saved in the specified error report location in Amazon S3 to troubleshoot issues.

- `COMPLETED_WITH_FAILURES` – AWS IoT SiteWise completed your request to import data from Amazon S3 with errors. You can use logs saved in the specified error report location in Amazon S3 to troubleshoot issues.

Type: String

Valid Values: `PENDING | CANCELLED | RUNNING | COMPLETED | FAILED | COMPLETED_WITH_FAILURES`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

KendraSourceDetail

The source details for the Kendra dataset source.

Contents

knowledgeBaseArn

The `knowledgeBaseArn` details for the Kendra dataset source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

roleArn

The `roleARN` details for the Kendra dataset source.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Location

Contains location information about the cited text and where it's stored.

Contents

uri

The URI of the location.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

LoggingOptions

Contains logging options.

Contents

level

The AWS IoT SiteWise logging verbosity level.

Type: String

Valid Values: `ERROR | INFO | OFF`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MatchedDataBinding

Represents a data binding that matches the specified filter criteria.

Contents

value

The value of the matched data binding.

Type: DataBindingValue object

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Measurement

Contains an asset measurement property. For more information, see Measurements in the *AWS IoT SiteWise User Guide*.

Contents

processingConfig

The processing configuration for the given measurement property. You can configure measurements to be kept at the edge or forwarded to the AWS Cloud. By default, measurements are forwarded to the cloud.

Type: MeasurementProcessingConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MeasurementProcessingConfig

The processing configuration for the given measurement property. You can configure measurements to be kept at the edge or forwarded to the AWS Cloud. By default, measurements are forwarded to the cloud.

Contents

forwardingConfig

The forwarding configuration for the given measurement property.

Type: ForwardingConfig object

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Metric

Contains an asset metric property. With metrics, you can calculate aggregate functions, such as an average, maximum, or minimum, as specified through an expression. A metric maps several values to a single value (such as a sum).

The maximum number of dependent/cascading variables used in any one metric calculation is 10. Therefore, a *root* metric can have up to 10 cascading metrics in its computational dependency tree. Additionally, a metric can only have a data type of `DOUBLE` and consume properties with data types of `INTEGER` or `DOUBLE`.

For more information, see Metrics in the *AWS IoT SiteWise User Guide*.

Contents

window

The window (time interval) over which AWS IoT SiteWise computes the metric's aggregation expression. AWS IoT SiteWise computes one data point per `window`.

Type: MetricWindow object

Required: Yes

expression

The mathematical expression that defines the metric aggregation function. You can specify up to 10 variables per expression. You can specify up to 10 functions per expression.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

processingConfig

The processing configuration for the given metric property. You can configure metrics to be computed at the edge or in the AWS Cloud. By default, metrics are forwarded to the cloud.

Type: MetricProcessingConfig object

Required: No

variables

The list of variables used in the expression.

Type: Array of ExpressionVariable objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MetricProcessingConfig

The processing configuration for the given metric property. You can configure metrics to be computed at the edge or in the AWS Cloud. By default, metrics are forwarded to the cloud.

Contents

computeLocation

The compute location for the given metric property.

Type: String

Valid Values: `EDGE` | `CLOUD`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MetricWindow

Contains a time interval window used for data aggregate computations (for example, average, sum, count, and so on).

Contents

tumbling

The tumbling time interval window.

Type: TumblingWindow object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MonitorErrorDetails

Contains AWS IoT SiteWise Monitor error details.

Contents

code

The error code.

Type: String

Valid Values: `INTERNAL_FAILURE | VALIDATION_ERROR | LIMIT_EXCEEDED`

Required: No

message

The error message.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MultiLayerStorage

Contains information about the storage destination.

Contents

customerManagedS3Storage

Contains information about a customer managed Amazon S3 bucket.

Type: CustomerManagedS3Storage object

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Parquet

A parquet file.

Contents

The members of this exception structure are context-dependent.

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PortalResource

Identifies an AWS IoT SiteWise Monitor portal.

Contents

id

The ID of the portal.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PortalStatus

Contains information about the current status of a portal.

Contents

state

The current state of the portal.

Type: String

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

Required: Yes

error

Contains associated error information, if any.

Type: MonitorErrorDetails object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PortalSummary

Contains a portal summary.

Contents

id

The ID of the portal.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

name

The name of the portal.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

startUrl

The URL for the AWS IoT SiteWise Monitor portal. You can use this URL to access portals that use IAM Identity Center for authentication. For portals that use IAM for authentication, you must use the AWS IoT SiteWise console to get a URL that you can use to access the portal.

Type: String

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

Pattern: `^(http|https)\://\S+`

Required: Yes

status

Contains information about the current status of a portal.

Type: PortalStatus object

Required: Yes

creationDate

The date the portal was created, in Unix epoch time.

Type: Timestamp

Required: No

description

The portal's description.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

lastUpdateDate

The date the portal was last updated, in Unix epoch time.

Type: Timestamp

Required: No

portalType

Define the type of portal. The value for AWS IoT SiteWise Monitor (Classic) is `SITEWISE_PORTAL_V1`. The value for AWS IoT SiteWise Monitor (AI-aware) is `SITEWISE_PORTAL_V2`.

Type: String

Valid Values: `SITEWISE_PORTAL_V1 | SITEWISE_PORTAL_V2`

Required: No

roleArn

The ARN of the service role that allows the portal's users to access your AWS IoT SiteWise resources on your behalf. For more information, see Using service roles for AWS IoT SiteWise Monitor in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.\+=,@]+$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PortalTypeEntry

The configuration entry associated with the specific portal type. The `portalTypeConfiguration` is a map of the `portalTypeKey` to the `PortalTypeEntry`.

Contents

portalTools

The array of tools associated with the specified portal type. The possible values are `ASSISTANT` and `DASHBOARD`.

Type: Array of strings

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ProjectResource

Identifies a specific AWS IoT SiteWise Monitor project.

Contents

id

The ID of the project.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ProjectSummary

Contains project summary information.

Contents

id

The ID of the project.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

name

The name of the project.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

creationDate

The date the project was created, in Unix epoch time.

Type: Timestamp

Required: No

description

The project's description.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

lastUpdateDate

The date the project was last updated, in Unix epoch time.

Type: Timestamp

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Property

Contains asset property information.

Contents

dataType

The property data type.

Type: String

Valid Values: `STRING | INTEGER | DOUBLE | BOOLEAN | STRUCT`

Required: Yes

id

The ID of the asset property.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

name

The name of the property.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: Yes

alias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000.

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

externalId

The external ID of the asset property. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Pattern: `[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: No

notification

The asset property's notification topic and state. For more information, see UpdateAssetProperty.

Type: PropertyNotification object

Required: No

path

The structured path to the property from the root of the asset.

Type: Array of AssetPropertyPathSegment objects

Required: No

type

The property type (see `PropertyType`). A property contains one type.

Type: PropertyType object

Required: No

unit

The unit (such as `Newtons` or `RPM`) of the asset property.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PropertyMapping

Maps a property from an interface asset model to a property in the asset model where the interface is applied.

Contents

assetModelPropertyId

The ID of the property in the asset model where the interface is applied.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

interfaceAssetModelPropertyId

The ID of the property in the interface asset model.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 139.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$|^externalId:[a-zA-Z0-9_][a-zA-Z_\-0-9.:]*[a-zA-Z0-9_]+`

Required: Yes

See Also

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

- AWS SDK for C++

- AWS SDK for Java V2
- AWS SDK for Ruby V3

PropertyMappingConfiguration

Contains configuration options for mapping properties from an interface asset model to an asset model where the interface is applied.

Contents

createMissingProperty

If true, missing properties from the interface asset model are automatically created in the asset model where the interface is applied.

Type: Boolean

Required: No

matchByPropertyName

If true, properties are matched by name between the interface asset model and the asset model where the interface is applied.

Type: Boolean

Required: No

overrides

A list of specific property mappings that override the automatic mapping by name when an interface is applied to an asset model.

Type: Array of PropertyMapping objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

PropertyNotification

Contains asset property value notification information. When the notification state is enabled, AWS IoT SiteWise publishes property value updates to a unique MQTT topic. For more information, see Interacting with other services in the *AWS IoT SiteWise User Guide*.

Contents

state

The current notification state.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: Yes

topic

The MQTT topic to which AWS IoT SiteWise publishes property value update notifications.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PropertyType

Contains a property type, which can be one of `attribute`, `measurement`, `metric`, or `transform`.

Contents

attribute

Specifies an asset attribute property. An attribute generally contains static information, such as the serial number of an IIoT wind turbine.

Type: Attribute object

Required: No

measurement

Specifies an asset measurement property. A measurement represents a device's raw sensor data stream, such as timestamped temperature values or timestamped power values.

Type: Measurement object

Required: No

metric

Specifies an asset metric property. A metric contains a mathematical expression that uses aggregate functions to process all input data points over a time interval and output a single data point, such as to calculate the average hourly temperature.

Type: Metric object

Required: No

transform

Specifies an asset transform property. A transform contains a mathematical expression that maps a property's data points from one form to another, such as a unit conversion from Celsius to Fahrenheit.

Type: Transform object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PropertyValueNullValue

The value type of null asset property data with BAD and UNCERTAIN qualities.

Contents

valueType

The type of null asset property data.

Type: String

Valid Values: `D | B | S | I | U`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

PutAssetPropertyValueEntry

Contains a list of value updates for an asset property in the list of asset entries consumed by the BatchPutAssetPropertyValue API operation.

Contents

entryId

The user specified ID for the entry. You can use this ID to identify which entries failed.

Type: String

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

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

Required: Yes

propertyValues

The list of property values to upload. You can specify up to 10 `propertyValues` array elements.

Type: Array of AssetPropertyValue objects

Required: Yes

assetId

The ID of the asset to update.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

propertyAlias

The alias that identifies the property, such as an OPC-UA server data stream path (for example, `/company/windfarm/3/turbine/7/temperature`). For more information, see Mapping industrial data streams to asset properties in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000.

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

propertyId

The ID of the asset property for this entry.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Reference

Contains the reference information.

Contents

dataset

Contains the dataset reference information.

Type: DataSetReference object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ResolveTo

The detailed resource this execution summary resolves to.

Contents

assetId

The ID of the asset that the resource resolves to.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Resource

Contains an AWS IoT SiteWise Monitor resource ID for a portal or project.

Contents

portal

A portal resource.

Type: PortalResource object

Required: No

project

A project resource.

Type: ProjectResource object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ResponseStream

Contains the response, citation, and trace from the SiteWise Assistant.

Contents

accessDeniedException

Access is denied.

Type: Exception
HTTP Status Code: 403

Required: No

conflictingOperationException

Your request has conflicting operations. This can occur if you're trying to perform more than one operation on the same resource at the same time.

Type: Exception
HTTP Status Code: 409

Required: No

internalFailureException

AWS IoT SiteWise can't process your request right now. Try again later.

Type: Exception
HTTP Status Code: 500

Required: No

invalidRequestException

The request isn't valid. This can occur if your request contains malformed JSON or unsupported characters. Check your request and try again.

Type: Exception
HTTP Status Code: 400

Required: No

limitExceededException

You've reached the quota for a resource. For example, this can occur if you're trying to associate more than the allowed number of child assets or attempting to create more than the allowed number of properties for an asset model.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: Exception
HTTP Status Code: 410

Required: No

output

Contains the SiteWise Assistant's response.

Type: InvocationOutput object

Required: No

resourceNotFoundException

The requested resource can't be found.

Type: Exception
HTTP Status Code: 404

Required: No

throttlingException

Your request exceeded a rate limit. For example, you might have exceeded the number of AWS IoT SiteWise assets that can be created per second, the allowed number of messages per second, and so on.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: Exception
HTTP Status Code: 429

Required: No

trace

Contains tracing information of the SiteWise Assistant's reasoning and data access.

Type: Trace object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

RetentionPeriod

The number of days your data is kept in the hot tier. By default, your data is kept indefinitely in the hot tier.

Contents

numberOfDays

The number of days that your data is kept.

> **Note**
>
> If you specified a value for this parameter, the `unlimited` parameter must be `false`.

Type: Integer

Required: No

unlimited

If true, your data is kept indefinitely.

> **Note**
>
> If configured to `true`, you must not specify a value for the `numberOfDays` parameter.

Type: Boolean

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

Row

Represents a single row in the query results.

Contents

data

List of data points in a single row of the result set.

Type: Array of Datum objects

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

SiemensIE

Contains details for a SiteWise Edge gateway that runs on a Siemens Industrial Edge Device.

Contents

iotCoreThingName

The name of the AWS IoT Thing for your SiteWise Edge gateway.

Type: String

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

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

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Source

The data source for the dataset.

Contents

arn

Contains the ARN of the dataset. If the source is Kendra, it's the ARN of the Kendra index.

Type: String

Required: No

location

Contains the location information where the cited text is originally stored. For example, if the data source is Kendra, and the text synchronized is from an S3 bucket, then the location refers to an S3 object.

Type: Location object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

SourceDetail

The details of the dataset source associated with the dataset.

Contents

kendra

Contains details about the Kendra dataset source.

Type: KendraSourceDetail object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

TargetResource

The resource the action will be taken on. This can include asset-based resources and computation model resources.

Contents

assetId

The ID of the asset, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

computationModelId

The ID of the computation model.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

TimeInNanos

Contains a timestamp with optional nanosecond granularity.

Contents

timeInSeconds

The timestamp date, in seconds, in the Unix epoch format. Fractional nanosecond data is provided by `offsetInNanos`.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 9223372036854774.

Required: Yes

offsetInNanos

The nanosecond offset from `timeInSeconds`.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 999999999.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

TimeSeriesSummary

Contains a summary of a time series (data stream).

Contents

dataType

The data type of the time series.

If you specify `STRUCT`, you must also specify `dataTypeSpec` to identify the type of the structure for this time series.

Type: String

Valid Values: `STRING | INTEGER | DOUBLE | BOOLEAN | STRUCT`

Required: Yes

timeSeriesArn

The ARN of the time series, which has the following format.

```
arn:${Partition}:iotsitewise:${Region}:${Account}:time-series/
${TimeSeriesId}
```

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Pattern: `^arn:aws(-cn|-us-gov)?:[a-zA-Z0-9-:\/_\.]+$`

Required: Yes

timeSeriesCreationDate

The date that the time series was created, in Unix epoch time.

Type: Timestamp

Required: Yes

timeSeriesId

The ID of the time series.

Type: String

Length Constraints: Minimum length of 36. Maximum length of 73.

Required: Yes

timeSeriesLastUpdateDate

The date that the time series was last updated, in Unix epoch time.

Type: Timestamp

Required: Yes

alias

The alias that identifies the time series.

Type: String

Length Constraints: Minimum length of 1.

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

assetId

The ID of the asset in which the asset property was created.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

dataTypeSpec

The data type of the structure for this time series. This parameter is required for time series that have the `STRUCT` data type.

The options for this parameter depend on the type of the composite model in which you created the asset property that is associated with your time series. Use `AWS/ALARM_STATE` for alarm state in alarm composite models.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

propertyId

The ID of the asset property, in UUID format.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^(?!00000000-0000-0000-0000-000000000000)[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Trace

Contains tracing information of the SiteWise Assistant's reasoning and data access.

Contents

text

The cited text from the data source.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Transform

Contains an asset transform property. A transform is a one-to-one mapping of a property's data points from one form to another. For example, you can use a transform to convert a Celsius data stream to Fahrenheit by applying the transformation expression to each data point of the Celsius stream. A transform can only have a data type of `DOUBLE` and consume properties with data types of `INTEGER` or `DOUBLE`.

For more information, see Transforms in the *AWS IoT SiteWise User Guide*.

Contents

expression

The mathematical expression that defines the transformation function. You can specify up to 10 variables per expression. You can specify up to 10 functions per expression.

For more information, see Quotas in the *AWS IoT SiteWise User Guide*.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: Yes

variables

The list of variables used in the expression.

Type: Array of ExpressionVariable objects

Required: Yes

processingConfig

The processing configuration for the given transform property. You can configure transforms to be kept at the edge or forwarded to the AWS Cloud. You can also configure transforms to be computed at the edge or in the cloud.

Type: TransformProcessingConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

TransformProcessingConfig

The processing configuration for the given transform property. You can configure transforms to be kept at the edge or forwarded to the AWS Cloud. You can also configure transforms to be computed at the edge or in the cloud.

Contents

computeLocation

The compute location for the given transform property.

Type: String

Valid Values: `EDGE` | `CLOUD`

Required: Yes

forwardingConfig

The forwarding configuration for a given property.

Type: ForwardingConfig object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

TumblingWindow

Contains a tumbling window, which is a repeating fixed-sized, non-overlapping, and contiguous time window. You can use this window in metrics to aggregate data from properties and other assets.

You can use `m`, `h`, `d`, and `w` when you specify an interval or offset. Note that `m` represents minutes, `h` represents hours, `d` represents days, and `w` represents weeks. You can also use `s` to represent seconds in `offset`.

The `interval` and `offset` parameters support the ISO 8601 format. For example, `PT5S` represents 5 seconds, `PT5M` represents 5 minutes, and `PT5H` represents 5 hours.

Contents

interval

The time interval for the tumbling window. The interval time must be between 1 minute and 1 week.

AWS IoT SiteWise computes the `1w` interval the end of Sunday at midnight each week (UTC), the `1d` interval at the end of each day at midnight (UTC), the `1h` interval at the end of each hour, and so on.

When AWS IoT SiteWise aggregates data points for metric computations, the start of each interval is exclusive and the end of each interval is inclusive. AWS IoT SiteWise places the computed data point at the end of the interval.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 23.

Required: Yes

offset

The offset for the tumbling window. The `offset` parameter accepts the following:

- The offset time.

  For example, if you specify `18h` for `offset` and `1d` for `interval`, AWS IoT SiteWise aggregates data in one of the following ways:

  - If you create the metric before or at 6 PM (UTC), you get the first aggregation result at 6 PM (UTC) on the day when you create the metric.
  - If you create the metric after 6 PM (UTC), you get the first aggregation result at 6 PM (UTC) the next day.
- The ISO 8601 format.

  For example, if you specify `PT18H` for `offset` and `1d` for `interval`, AWS IoT SiteWise aggregates data in one of the following ways:

  - If you create the metric before or at 6 PM (UTC), you get the first aggregation result at 6 PM (UTC) on the day when you create the metric.
  - If you create the metric after 6 PM (UTC), you get the first aggregation result at 6 PM (UTC) the next day.
- The 24-hour clock.

  For example, if you specify `00:03:00` for `offset`, `5m` for `interval`, and you create the metric at 2 PM (UTC), you get the first aggregation result at 2:03 PM (UTC). You get the second aggregation result at 2:08 PM (UTC).
- The offset time zone.

  For example, if you specify `2021-07-23T18:00-08` for `offset` and `1d` for `interval`, AWS IoT SiteWise aggregates data in one of the following ways:

  - If you create the metric before or at 6 PM (PST), you get the first aggregation result at 6 PM (PST) on the day when you create the metric.
  - If you create the metric after 6 PM (PST), you get the first aggregation result at 6 PM (PST) the next day.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 25.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

UserIdentity

Contains information for a user identity in an access policy.

Contents

id

The IAM Identity Center ID of the user.

Type: String

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

Pattern: \S+

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

VariableValue

Identifies a property value used in an expression.

Contents

hierarchyId

The ID of the hierarchy to query for the property ID. You can use the hierarchy's name instead of the hierarchy's ID. If the hierarchy has an external ID, you can specify `externalId:` followed by the external ID. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

You use a hierarchy ID instead of a model ID because you can have several hierarchies using the same model and therefore the same `propertyId`. For example, you might have separately grouped assets that come from the same asset model. For more information, see Asset hierarchies in the *AWS IoT SiteWise User Guide*.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

propertyId

The ID of the property to use as the variable. You can use the property `name` if it's from the same asset model. If the property has an external ID, you can specify `externalId:` followed by the external ID. For more information, see Using external IDs in the *AWS IoT SiteWise User Guide*.

Type: String

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

Pattern: `[^\u0000-\u001F\u007F]+`

Required: No

propertyPath

The path of the property.

Type: Array of AssetModelPropertyPathSegment objects

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Variant

Contains an asset property value (of a single type only).

Contents

booleanValue

Asset property data of type Boolean (true or false).

Type: Boolean

Required: No

doubleValue

Asset property data of type double (floating point number). The min value is -10^10. The max value is 10^10. Double.NaN is allowed.

Type: Double

Required: No

integerValue

Asset property data of type integer (whole number).

Type: Integer

Required: No

nullValue

The type of null asset property data with BAD and UNCERTAIN qualities.

Type: PropertyValueNullValue object

Required: No

stringValue

Asset property data of type string (sequence of characters). The allowed pattern: "^$|[^\u0000-\u001F\u007F]+". The max length is 1024.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

WarmTierRetentionPeriod

Set this period to specify how long your data is stored in the warm tier before it is deleted. You can set this only if cold tier is enabled.

Contents

numberOfDays

The number of days the data is stored in the warm tier.

Type: Integer

Required: No

unlimited

If set to true, the data is stored indefinitely in the warm tier.

Type: Boolean

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see Signing AWS API requests in the *IAM User Guide*.

Action

The action to be performed.

Type: string

Required: Yes

Version

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

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

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key*/*YYYYMMDD*/*region*/*service*/aws4_request.

For more information, see Create a signed AWS API request in the *IAM User Guide*.

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

Type: string

Required: Conditional

X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: `20120325T120000Z`.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Elements of an AWS API request signature in the *IAM User Guide*.

Type: string

Required: Conditional

X-Amz-Security-Token

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS STS, see AWS services that work with IAM in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, you must include the security token.

Type: string

Required: Conditional

X-Amz-Signature

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

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

Type: string

Required: Conditional

X-Amz-SignedHeaders

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Create a signed AWS API request in the *IAM User Guide*.

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

Type: string

Required: Conditional

Common Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 400

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 400

InternalFailure

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

HTTP Status Code: 500

InvalidAction

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

HTTP Status Code: 400

InvalidClientTokenId

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

HTTP Status Code: 403

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 400

OptInRequired

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

HTTP Status Code: 403

RequestExpired

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

HTTP Status Code: 400

ServiceUnavailable

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

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

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

HTTP Status Code: 400