



API Reference

AWS IoT SiteWise



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AWS IoT SiteWise: API Reference

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Welcome

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 July 2, 2024.

Actions

The following actions are supported:

- [AssociateAssets](#)
- [AssociateTimeSeriesToAssetProperty](#)
- [BatchAssociateProjectAssets](#)
- [BatchDisassociateProjectAssets](#)
- [BatchGetAssetPropertyAggregates](#)
- [BatchGetAssetPropertyValue](#)
- [BatchGetAssetPropertyValueHistory](#)
- [BatchPutAssetPropertyValue](#)
- [CreateAccessPolicy](#)
- [CreateAsset](#)
- [CreateAssetModel](#)
- [CreateAssetModelCompositeModel](#)
- [CreateBulkImportJob](#)
- [CreateDashboard](#)
- [CreateGateway](#)
- [CreatePortal](#)
- [CreateProject](#)
- [DeleteAccessPolicy](#)
- [DeleteAsset](#)
- [DeleteAssetModel](#)
- [DeleteAssetModelCompositeModel](#)
- [DeleteDashboard](#)
- [DeleteGateway](#)
- [DeletePortal](#)
- [DeleteProject](#)
- [DeleteTimeSeries](#)
- [DescribeAccessPolicy](#)

- [DescribeAction](#)
- [DescribeAsset](#)
- [DescribeAssetCompositeModel](#)
- [DescribeAssetModel](#)
- [DescribeAssetModelCompositeModel](#)
- [DescribeAssetProperty](#)
- [DescribeBulkImportJob](#)
- [DescribeDashboard](#)
- [DescribeDefaultEncryptionConfiguration](#)
- [DescribeGateway](#)
- [DescribeGatewayCapabilityConfiguration](#)
- [DescribeLoggingOptions](#)
- [DescribePortal](#)
- [DescribeProject](#)
- [DescribeStorageConfiguration](#)
- [DescribeTimeSeries](#)
- [DisassociateAssets](#)
- [DisassociateTimeSeriesFromAssetProperty](#)
- [ExecuteAction](#)
- [ExecuteQuery](#)
- [GetAssetPropertyAggregates](#)
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- [GetInterpolatedAssetPropertyValues](#)
- [ListAccessPolicies](#)
- [ListActions](#)
- [ListAssetModelCompositeModels](#)
- [ListAssetModelProperties](#)
- [ListAssetModels](#)
- [ListAssetProperties](#)

- [ListAssetRelationships](#)
- [ListAssets](#)
- [ListAssociatedAssets](#)
- [ListBulkImportJobs](#)
- [ListCompositionRelationships](#)
- [ListDashboards](#)
- [ListGateways](#)
- [ListPortals](#)
- [ListProjectAssets](#)
- [ListProjects](#)
- [ListTagsForResource](#)
- [ListTimeSeries](#)
- [PutDefaultEncryptionConfiguration](#)
- [PutLoggingOptions](#)
- [PutStorageConfiguration](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateAccessPolicy](#)
- [UpdateAsset](#)
- [UpdateAssetModel](#)
- [UpdateAssetModelCompositeModel](#)
- [UpdateAssetProperty](#)
- [UpdateDashboard](#)
- [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: `^[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: `^[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: `^[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 limit 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 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: `^[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: `^[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 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: `^[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: `^[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 limit 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 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: `^[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: `^[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 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 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,
        "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 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,
            "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 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

{
  "entries": [
    {
      "assetId": "string",
      "entryId": "string",
      "propertyAlias": "string",
```

```
"propertyId": "string",
"propertyValues": [
  {
    "quality": "string",
    "timestamp": {
      "offsetInNanos": number,
      "timeInSeconds": number
    },
    "value": {
      "booleanValue": boolean,
      "doubleValue": number,
      "integerValue": number,
      "stringValue": "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 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 limit 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 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.

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: `^[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 limit 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 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: `^[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: `^[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: `^[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 limit 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 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 two types of asset models, `ASSET_MODEL` or `COMPONENT_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.

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: `^[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, friendly 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

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: `^[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 limit 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 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
```

```
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: $^{[0-9a-f]\{8\}-[0-9a-f]\{4\}-[0-9a-f]\{4\}-[0-9a-f]\{4\}-[0-9a-f]\{12\}}\$|$
 $^{\text{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.

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: `^[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, friendly 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: `^[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: `^[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: `^[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 limit 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 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. It does not trigger computations or notifications on AWS IoT SiteWise warm or cold tier storage.

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: `^[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 limit 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 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. 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: .+

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: ^[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: `^[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 limit 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 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": {
      "coreDeviceThingName": "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, friendly 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

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: `^[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 limit 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 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",
  "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: `[^@]+@[^@]+`

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: `[^@]+@[^@]+`

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

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: `^[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 limit 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 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: `^[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: `^[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 limit 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 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: $^{[0-9a-f]\{8\}-[0-9a-f]\{4\}-[0-9a-f]\{4\}-[0-9a-f]\{4\}-[0-9a-f]\{12\}}\$$

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 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: `^[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 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
```

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: `^[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

{
  "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

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 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
```

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: `^[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: `^[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

{
  "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

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 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: `^[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 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: `^[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](#).

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 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: `^[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 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: `^[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 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: `^[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: `^[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 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: `^[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: `^[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 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: `^[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,
  "targetResource": {
    "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.

actionDefinitionId

The ID of the action definition.

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}$`

actionId

The ID of the action.

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}$`

actionPayload

The JSON payload of the action.

Type: [ActionPayload](#) object

executionTime

The time the action was executed.

Type: Timestamp

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

DescribeAssetModel

Retrieves information about an asset model.

Request Syntax

```
GET /asset-models/assetModelId?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: `^[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 model properties from the response.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200  
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"
}

```

Response Elements

If the action is successful, the service sends back an HTTP 200 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-:\/_\.]+\$

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: `^[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

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 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 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: `^[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: `^[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"
    }
  ],
  "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: `^[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: `^[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 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: `^[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: `^[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: `^[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: `^[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 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: `^[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: `^[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 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: `^[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: `^[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: `^[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 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: `SITWISE_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 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: `^[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": {
    "coreDeviceThingName": "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: `^[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

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

DescribeGatewayCapabilityConfiguration

Retrieves information about a gateway capability configuration. Each gateway capability defines data sources for a gateway. A capability configuration can contain multiple data source configurations. If you define OPC-UA sources for a gateway in the AWS IoT SiteWise console, all of your OPC-UA sources are stored in one capability configuration. To list all capability configurations for a gateway, use [DescribeGateway](#).

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 from the AWS IoT SiteWise console, your OPC-UA capability configuration has the namespace `iotsitewise:opcuacollector:version`, where `version` is a number such as 1.

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: `^[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 104857600.

[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 capability configuration. The sync status can be one of the following:

- `IN_SYNC` – The gateway is running the capability configuration.
- `OUT_OF_SYNC` – The gateway hasn't received the capability configuration.

- SYNC_FAILED – The gateway rejected the capability configuration.

Type: String

Valid Values: IN_SYNC | OUT_OF_SYNC | SYNC_FAILED | UNKNOWN

gatewayId

The ID of the gateway that defines the capability configuration.

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}$`

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 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 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: `^[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"
},
"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: `[^@]+@[^@]+`

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: `^[^@]+@[^@]+`

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: `^[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

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 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: `^[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: `^[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: `^[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 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"
  },
  "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

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:

- `SITWISE_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: `SITWISE_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 `CreateBulkImportJob` 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 limit 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 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: `^[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: `^[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: `^[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: `^[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 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: `^[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: `^[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: `^[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 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: `^[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: `^[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 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",
  "targetResource": {
    "assetId": "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: `^[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

[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: `^[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 limit 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 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
```

```
{
  "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.

maxResults

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

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 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=nextToken  
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: `^[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: `^[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 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: `^[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: `^[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,
      "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 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=propertyAlias  
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: `^[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: `^[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,
        "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 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: `^[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: `^[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,
        "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 `endTimeInSeconds`.

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 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=nextToken  
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: `^[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 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&targetResourceId=targetResourceId&targetResourceType=  
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+/=]+`

targetResourceId

The ID of the target resource.

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

Pattern: `^[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

targetResourceType

The type of resource.

Valid Values: ASSET

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",
      "targetResource": {
        "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.

[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 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?  
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: `^[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

{
  "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 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?  
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: `^[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 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",
      "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 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&maxResults=maxResults&nextToken=nextToken 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.

Valid Values: ASSET_MODEL | COMPONENT_MODEL

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"
      }
    }
  ],
  "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 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: `^[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 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: `^[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 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: `^[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 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: `^[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: `^[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 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 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: `^[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 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: ^[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 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": {
        "coreDeviceThingName": "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 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",
    "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 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: ^[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: `^[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 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: ^[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 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 limit 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 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&timeSeriesType=timeSeriesType
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: `^[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 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 limit 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 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 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
```

```
{
  "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.

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:

- `SITWISE_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 CreateBulkImportJob 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"
  },
  "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

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:

- `SITWISE_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: `SITWISE_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 `CreateBulkImportJob` 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 limit 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 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 limit 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 limit 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 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 limit 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 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: `^[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 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: `^[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 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
```

```
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"
}
],
"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: `^[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.

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, friendly 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 limit 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 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
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: `^[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: `^[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.

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, friendly 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 limit 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 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: `^[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: `^[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 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: `^[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. 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: `.+`

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 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: `^[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, friendly 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 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. A capability configuration can contain multiple data source configurations. If you define OPC-UA sources for a gateway in the AWS IoT SiteWise console, all of your OPC-UA sources are stored in one capability configuration. To list all capability configurations for a gateway, use [DescribeGateway](#).

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: `^[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 104857600.

Required: Yes

capabilityNamespace

The namespace of the gateway capability configuration to be updated. For example, if you configure OPC-UA sources from the AWS IoT SiteWise console, your OPC-UA capability configuration has the namespace `iotsitewise:opcuacollector:version`, where `version` is a number such as 1.

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 capability configuration. The sync status can be one of the following:

- `IN_SYNC` – The gateway is running the capability configuration.
- `OUT_OF_SYNC` – The gateway hasn't received the capability configuration.
- `SYNC_FAILED` – The gateway rejected the capability configuration.

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`

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 limit 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 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",
  "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: `^[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: `[^@]+@[^@]+`

Required: No

portalContactEmail

The AWS administrator's contact email address.

Type: String

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

Pattern: `[^@]+@[^@]+`

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

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 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: `^[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 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](#)
- [AssetCompositeModel](#)
- [AssetCompositeModelPathSegment](#)
- [AssetCompositeModelSummary](#)
- [AssetErrorDetails](#)
- [AssetHierarchy](#)
- [AssetHierarchyInfo](#)
- [AssetModelCompositeModel](#)
- [AssetModelCompositeModelDefinition](#)
- [AssetModelCompositeModelPathSegment](#)
- [AssetModelCompositeModelSummary](#)
- [AssetModelHierarchy](#)
- [AssetModelHierarchyDefinition](#)
- [AssetModelProperty](#)

- [AssetModelPropertyDefinition](#)
- [AssetModelPropertyPathSegment](#)
- [AssetModelPropertySummary](#)
- [AssetModelStatus](#)
- [AssetModelSummary](#)
- [AssetProperty](#)
- [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](#)
- [ColumnInfo](#)
- [ColumnType](#)
- [CompositeModelProperty](#)
- [CompositionDetails](#)
- [CompositionRelationshipItem](#)
- [CompositionRelationshipSummary](#)
- [ConfigurationErrorDetails](#)
- [ConfigurationStatus](#)
- [Csv](#)
- [CustomerManagedS3Storage](#)
- [DashboardSummary](#)
- [Datum](#)
- [DetailedError](#)
- [ErrorDetails](#)
- [ErrorReportLocation](#)
- [ExpressionVariable](#)
- [File](#)
- [FileFormat](#)
- [ForwardingConfig](#)
- [GatewayCapabilitySummary](#)
- [GatewayPlatform](#)
- [GatewaySummary](#)
- [Greengrass](#)
- [GreengrassV2](#)
- [GroupIdentity](#)
- [IAMRoleIdentity](#)
- [IAMUserIdentity](#)
- [Identity](#)
- [Image](#)

- [ImageFile](#)
- [ImageLocation](#)
- [InterpolatedAssetPropertyValue](#)
- [JobConfiguration](#)
- [JobSummary](#)
- [LoggingOptions](#)
- [Measurement](#)
- [MeasurementProcessingConfig](#)
- [Metric](#)
- [MetricProcessingConfig](#)
- [MetricWindow](#)
- [MonitorErrorDetails](#)
- [MultiLayerStorage](#)
- [Parquet](#)
- [PortalResource](#)
- [PortalStatus](#)
- [PortalSummary](#)
- [ProjectResource](#)
- [ProjectSummary](#)
- [Property](#)
- [PropertyNotification](#)
- [PropertyType](#)
- [PutAssetPropertyValueEntry](#)
- [Resource](#)
- [RetentionPeriod](#)
- [Row](#)
- [TargetResource](#)
- [TimeInNanos](#)
- [TimeSeriesSummary](#)
- [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: `^[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: `^[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.

Contents

actionDefinitionId

The ID of the action definition.

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

actionId

The ID of the action.

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

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](#)

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: `^[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: `^[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: `^[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: `^[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: `^[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: `^[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: `^[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](#)

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: `^[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: `^[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: `^[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: `^[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: `^[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 calling [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: `^[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: `^[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: `^[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.

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 calling [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: `^[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](#)

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: `^[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: `^[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.

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: `^[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: `^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

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: `^[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

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: `^[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](#)

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: `^[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: `^[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: `^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

See Also

For more information about using this API in 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: `^[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: `^[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: `^[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: `^[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: `^[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: `^[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: `^[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: `^[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: `^[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: `^[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](#)

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 its 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: `^[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: `^[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: `^[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: `^[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](#)

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](#)

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: `^[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](#)

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](#)

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 from the AWS IoT SiteWise console, your OPC-UA capability configuration has the namespace `iotsitewise:opcuacollector:version`, where `version` is a number such as 1.

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 capability configuration. The sync status can be one of the following:

- `IN_SYNC` – The gateway is running the capability configuration.
- `OUT_OF_SYNC` – The gateway hasn't received the capability configuration.
- `SYNC_FAILED` – The gateway rejected the capability configuration.

Type: String

Valid Values: `IN_SYNC` | `OUT_OF_SYNC` | `SYNC_FAILED` | `UNKNOWN`

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

Contains a gateway's platform information.

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

See Also

For more information about using this API in 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: `^[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 asset.

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

Contains a gateway's platform information.

Type: [GatewayPlatform](#) 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](#)

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 [ListGroup](#)s 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.

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](#)

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](#)

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: `^[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: `^[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](#)

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](#)

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: `^[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](#)

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](#)

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

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 1. Maximum length of 1024.

Required: Yes

variables

The list of variables used in the expression.

Type: Array of [ExpressionVariable](#) objects

Required: Yes

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

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

See Also

For more information about using this API in 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: `^[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 | 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: `^[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

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](#)

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: `^[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: `^[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: `^[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](#)

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](#)

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: `^[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: `^[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](#)

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](#)

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

Valid Range: Minimum value of 30.

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](#)

TargetResource

The resource the action will be taken on.

Contents

assetId

The ID of the asset, in UUID format.

Type: String

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

Pattern: `^[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](#)

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: `^[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: `^[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](#)

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 1. 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).

Type: Double

Required: No

integerValue

Asset property data of type integer (whole number).

Type: Integer

Required: No

stringValue

Asset property data of type string (sequence of characters).

Type: String

Required: No

See Also

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

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

- [AWS SDK for 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

Valid Range: Minimum value of 30.

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