
Tooling API

Reference and Developer Guide

Version 59.0, Winter '24



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CHAPTER 1 Introducing Tooling API

Use Tooling API to build custom development tools or apps for Lightning Platform applications. Tooling API's SOQL capabilities for many metadata types allow you to retrieve smaller pieces of metadata. Smaller retrieves improve performance, which makes Tooling API a better fit for developing interactive applications. Tooling API provides SOAP and REST interfaces.

For example, you can:

- Add features and functionality to your existing Lightning Platform tools.
- Build dynamic modules for Lightning Platform development into your enterprise integration tools.
- Build specialized development tools for a specific application or service.

Tooling API exposes metadata used in developer tooling that you can access through REST or SOAP.

For detailed descriptions of Tooling API objects and the REST resources and SOAP calls that each object supports, see [Tooling API Objects](#).

IN THIS SECTION:

[When to Use Tooling API](#)

Use Tooling API when you need fine-grained access to an org's metadata. Tooling API's SOQL capabilities for many metadata types allow you to retrieve smaller pieces of metadata. Smaller retrieves improve performance, which makes Tooling API a better fit for developing interactive applications.

[Tooling API Release Notes](#)

Use the Salesforce Release Notes to learn about the most recent updates and changes to Tooling API.

[REST Overview](#)

Use REST if you're using a language that isn't strongly typed, like JavaScript.

[API End-of-Life Policy](#)

See which Tooling REST and SOAP API versions are supported, unsupported, or unavailable.

When to Use Tooling API

Use Tooling API when you need fine-grained access to an org's metadata. Tooling API's SOQL capabilities for many metadata types allow you to retrieve smaller pieces of metadata. Smaller retrieves improve performance, which makes Tooling API a better fit for developing interactive applications.

Because Tooling API allows you to change just one element within a complex type, it can be easier to use than Metadata API. Other use cases include:

- Source control integration
- Continuous integration
- Apex classes or trigger deployment

Some of the specific tasks you can accomplish using the Tooling API:

Retrieve metadata about an object's field

Use [FieldDefinition](#).

Retrieve custom or standard object properties

Use [EntityDefinition](#).

Manage working copies of Apex classes and triggers and Visualforce pages and components.

Use [ApexClassMember](#), [ApexTriggerMember](#), [ApexPageMember](#), [ApexComponentMember](#), and [MetadataContainer](#).

Manage working copies of static resource files.

Use [StaticResource](#).

Check for updates and errors in working copies of Apex classes and triggers and Visualforce pages and components.

[ContainerAsyncRequest](#)

Commit changes to your organization.

Use [ContainerAsyncRequest](#).

Set heap dump markers.

Use [ApexExecutionOverlayAction](#)

Overlay Apex code or SOQL statements on an Apex execution.

Use [ApexExecutionOverlayAction](#).

Execute anonymous Apex.

For sample code, see [SOAP Calls](#) and [REST Overview](#).

Generate log files for yourself or for other users.

Set checkpoints with [TraceFlag](#)

Access debug log and heap dump files.

Use [ApexLog](#) and [ApexExecutionOverlayResult](#).

Manage custom fields on custom objects.

Use [CustomField](#).

Access code coverage results.

Use [ApexCodeCoverage](#), [ApexOrgWideCoverage](#), and [ApexCodeCoverageAggregate](#).

Execute tests, and manage test results.

Use [ApexTestQueueItem](#) and [ApexTestResult](#).

Manage validation rules and workflow rules.

Use [ValidationRule](#) and [WorkflowRule](#).

SEE ALSO:

[REST Overview](#)

[SOAP Calls](#)

Tooling API Release Notes

Use the Salesforce Release Notes to learn about the most recent updates and changes to Tooling API.

For updates and changes that impact the Salesforce Platform, including Tooling API, see the [API Release Notes](#).

For new, changed, and deprecated Tooling API objects and other changes specific to Tooling API, see [Tooling API New and Changed Objects](#).

REST Overview

Use REST if you're using a language that isn't strongly typed, like JavaScript.

For details on usage, syntax, and authentication, see the *REST API Developer Guide*.

IN THIS SECTION:

[REST Resources](#)

REST resources give you access to Tooling API objects. When querying Tooling API objects using REST resources, keep in mind that the user permissions needed for access vary from endpoint to endpoint and from object to object. Check the description of the endpoint and object you want to use to determine user permission requirements for access.

[REST Resource Examples](#)

Robust examples using REST resources in the Tooling API.

[REST Headers](#)

Use REST if you're using a language that isn't strongly typed, like JavaScript.

[REST Header Examples](#)

Use these examples to understand REST headers.

[Improve Performance with the Composite Resource](#)

Use the `/composite` resource to improve the performance of a development tool or app built with Tooling API. This resource executes a series of Tooling API requests in a single call, minimizing the number of round trips needed between the client and server. You can use the output of one request as the input to a subsequent request. The requests' response bodies and HTTP statuses are returned in a single response body. The entire request counts as a single call toward your API limits. Available in API version 40.0 and later.

[Group Operations for Fewer Round Trips with SObject Collections](#)

Executes actions on multiple records in one request. Use SObject Collections to reduce the number of round-trips between the client and server. This resource is available in API version 45.0 and later.

SEE ALSO:

[Tooling API Objects](#)

[REST API Developer Guide](#)

REST Resources

REST resources give you access to Tooling API objects. When querying Tooling API objects using REST resources, keep in mind that the user permissions needed for access vary from endpoint to endpoint and from object to object. Check the description of the endpoint and object you want to use to determine user permission requirements for access.

For details on usage, syntax, and authentication, see the *REST API Developer Guide*.

For examples, see [REST Resource Examples](#).

For information on how to minimize the number of round trips between client and server, see [Improve Performance with the Composite Resource](#).

REST Resources Supported by Tooling API

The base URI for each Tooling API REST resource is `http://domain/services/data/vXX.X/tooling/` where *domain* is a My Domain or a custom domain and *vXX.X* is the API version number. For example:

`https://MyDomainName.my.salesforce.com/services/data/v35.0/tooling/`

Like the REST API, Tooling API uses the following resources.

/completions?type=

Supported methods: GET

Retrieves available code completions of the referenced type for Apex system method symbols (`type=apex`). Available from API version 28.0 or later.

Retrieves available code completions of the referenced type for Visualforce markup (`type=visualforce`). Available from API version 38.0 or later.

/executeAnonymous/?anonymousBody= <url encoded body>

Supported methods: GET

Executes Apex code anonymously. Available from API version 29.0 or later.

/query/?q=SOQL_Query_Statement

Supported methods: GET

Executes a query against an object and returns data that matches the specified criteria. Tooling API exposes objects like `EntityDefinition` and `FieldDefinition` that use the external object framework. That is, they don't exist in the database but are constructed dynamically. Special query rules apply to virtual entities.

If the query result is too large, it's broken up into batches. The response contains the first batch of results and a query identifier. The identifier can be used in a request to retrieve the next batch.

/runTestsAsynchronous/

Supported methods: POST

Runs one or more methods within one or more Apex classes, using the asynchronous test execution mechanism. In the request body, you can specify test class names and IDs, suite names and IDs, the maximum number of failed tests to allow, and the test level, as comma-separated lists or as an array. You can also indicate whether to opt out of collecting code coverage information during the test run (available in API version 43.0 and later).

```
/runTestsAsynchronous/ Body:
{"classNames":
  "comma-separated list of class names",
"classids":
  "comma-separated list of class IDs",
"suiteNames":
  "comma-separated list of test suite names",
"suiteids":
  "comma-separated list of test suite IDs",
"maxFailedTests":
  "integer value",
"testLevel":
  "TestLevel enum value",
"skipCodeCoverage":
  "boolean value"}
```

OR

```
/runTestsAsynchronous/ Body:
{"tests": tests array}
```

Example `tests array`.

```
[{
  "className":
    "YourClassName",
```

```

    "testMethods": [
      "testMethod1",
      "testMethod2",
      "testMethod3"
    ]
  }, {
    "className":
      "ManagedPackageNamespace.ManagedClassName",
    "testMethods": [
      "testMethod1",
      "testMethod2",
      "testMethod3"
    ]
  }, {
    "classId":
      "01pD0000000FhyEIAS",
    "testMethods": [
      "testMethod1",
      "testMethod2",
      "testMethod3"
    ]
  }, {
    "maxFailedTests": "2"
  }, {
    "testLevel":
      "RunSpecifiedTests"
  }
]]

```

- You must provide `classNames`, `classids`, `suiteNames`, `suiteids`, or a `tests` array. If you provide `classNames`, `classids`, `suiteNames`, or `suiteids`, you can't also provide a `tests` array. However, you can provide `classNames`, `classids`, `suiteNames`, and `suiteids`.
- `tests` array is an array of objects that represent Apex test classes—each of which has a `className` or `classId` and a `testMethods` parameter. The `tests` array also includes optional `maxFailedTests` and `testLevel` parameters.
- Multiple occurrences of a test method name in a `testMethods` array are ignored. Test methods that don't exist are skipped. A null or missing `testMethods` array specifies that all test methods in the test class are run.
- To allow all tests in your run to execute, regardless of how many tests fail, omit `maxFailedTests` or set it to `-1`. To stop the test run from executing new tests after a given number of tests fail, set `maxFailedTests` to an integer value from 0 to 1,000,000. This integer value sets the maximum allowable test failures. A value of 0 causes the test run to stop if any failure occurs. A value of 1 causes the test run to stop on the second failure, and so on. Keep in mind that high values can cause slow performance. Each 1,000 tests that you add to your `maxFailedTests` value adds about 3 seconds to your test run, not including the time that the tests take to execute.
- The `testLevel` parameter is optional. If you don't provide a `testLevel` value, we use `RunSpecifiedTests`.

Permissible values include:

RunSpecifiedTests

Only the tests that you specify are run.

RunLocalTests

All tests in your org are run, except the ones that originate from installed managed packages.

Omit identifiers for specific tests when you use this value.

RunAllTestsInOrg

All tests are run. The tests include all tests in your org, including tests of managed packages.

Omit identifiers for specific tests when you use this value.

/runTestsSynchronous/

Supported methods: POST

```
/runTestsSynchronous/ Body:
{"tests": tests array}
```

Example *tests array* with Apex class names:

```
[{
  "className":
    "YourClassName",
  "testMethods": [
    "testMethod1",
    "testMethod2",
    "testMethod3"
  ]
}, {
  "maxFailedTests": "2"
}]
```

Example *tests array* with Apex class IDs:

```
[{
  "classId":
    "01pD0000000Fhy9IAC",
  "testMethods": [
    "testMethod1",
    "testMethod2",
    "testMethod3"
  ]
}, {
  "maxFailedTests": "2"
}]
```

- Runs one or more methods within an Apex class, using the synchronous test execution mechanism. All test methods in a synchronous test run must be in the same class.
- For API version 40.0 and later, running Apex tests synchronously using the POST method for `/runTestsSynchronous/` requires the View Setup user permission.
- *tests array* is an array of an object that represents an Apex test class—which has a `className` or a `classId`, and a `testMethods` parameter—and an optional `maxFailedTests` parameter.
- Multiple occurrences of a test method name in a `testMethods` array are ignored. Test methods that don't exist are skipped. A null or missing `testMethods` array specifies that all test methods in the test class are run.
- To allow all tests in your run to execute, regardless of how many tests fail, omit `maxFailedTests` or set it to `-1`. To stop the test run from executing new tests after a given number of tests fail, set `maxFailedTests` to an integer value from 0 to 1,000,000. This integer value sets the maximum allowable test failures. A value of 0 causes the test run to stop if any failure occurs. A value of 1 causes the test run to stop on the second failure, and so on. Keep in mind that high values can cause slow performance. Each 1,000 tests that you add to your `maxFailedTests` value adds about 3 seconds to your test run, not including the time that the tests take to execute.

/search/?q=SOSL_Search_Statement

Supported methods: GET

Search for records containing specified values.

/subjects/

Supported methods: GET

Lists the available Tooling API objects and their metadata.

/subjects/SObjectName/

Supported methods: GET, POST

Describes the individual metadata for the specified object or creates a record for a given object.

- To retrieve the metadata for the ApexExecutionOverlayAction object, use the GET method.
- To create a ApexExecutionOverlayAction object, use the POST method.

/subjects/SObjectName/describe/

Supported methods: GET

Completely describes the individual metadata at all levels for the specified object.

For example, use this resource to retrieve the fields, URLs, and child relationships for a Tooling API object.

/subjects/SObjectName/id/

Supported methods: GET, PATCH, DELETE

Accesses records based on the specified object ID.

Use the GET method to retrieve records or fields, the DELETE method to delete records, and the PATCH method to update records.

/subjects/ApexLog/id/Body/

Supported methods: GET

Retrieves a raw debug log by ID. Available from API version 28.0 or later.

REST Resource Examples

Robust examples using REST resources in the Tooling API.

Example Setup

The following examples use Apex to execute REST requests, but you can use any standard REST tool to access the Tooling API.



Note: The examples in this guide use a production login URL with *MyDomainName* in place of the org's My Domain name. The format for sandbox login URLs differs. To use these examples, update the login URL. You can find the My Domain name and My Domain login URL for your org on the My Domain page in Setup.

First, set up the connection to your org and the HTTP request type:

```
HttpRequest req = new HttpRequest();
req.setHeader('Authorization', 'Bearer ' + UserInfo.getSessionID());
req.setHeader('Content-Type', 'application/json');
```

At the end of each request, add the following code to send the request and retrieve the body of the response:

```
Http h = new Http();
HttpResponse res = h.send(req);
system.debug(res.getBody());
```

Retrieve a Description

To get a description of all available objects in Tooling API:

```
req.setEndpoint('https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/subjects/');
req.setMethod('GET');
```

To get a description of a specific Tooling API object, for example, [TraceFlag](#):

```
req.setEndpoint('https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/subjects/TraceFlag/');
req.setMethod('GET');
```


To get a description of all metadata for a specific Tooling API object, for example, [TraceFlag](#):

```
req.setEndpoint('https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/subjects/TraceFlag/describe/');
req.setMethod('GET');
```

Manipulate Objects by ID

To create a new Tooling API object, for example, [MetadataContainer](#):

```
req.setEndpoint('https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/subjects/MetadataContainer/');
req.setBody('{"Name":"TestContainer"}');
req.setMethod('POST');
```

 **Tip:** Use the ID from this call in the rest of the examples.

To retrieve a Tooling API object by ID, for example, [MetadataContainer](#):

```
req.setEndpoint('https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/subjects/MetadataContainer/ + containerID + '/');
req.setMethod('GET');
```

To update a Tooling API object by ID, for example, [MetadataContainer](#):

```
req.setEndpoint('https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/subjects/MetadataContainer/ + containerID + '/');
req.setBody('{"Name":"NewlyNamedContainer"}');
req.setMethod('PATCH');
```

To query a Tooling API object by ID, for example, [MetadataContainer](#):

```
req.setEndpoint('https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/query/?q=Select+id,Name+from+MetadataContainer+Where+ID=\' + containerID + \'');
req.setMethod('GET');
```

Query Within MetadataContainer

To query an object within a [MetadataContainer](#):

```
req.setEndpoint('https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/query/?q=Select+id,Body,LastSyncDate,Metadata+from+ApexClassMember+Where+MetadataContainerID=\'');
```

```
+ containerID + '\\');
req.setMethod('GET');
```

Check Deployment Status

To check on the status of a deployment, using [ContainerAsyncRequest](#):

```
req.setEndpoint('https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/objects/ContainerAsyncRequest/' + requestID + '/');
req.setMethod('GET');
```

Execute Anonymous Apex

To execute anonymous Apex:

```
req.setEndpoint('https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/executeAnonymous/?anonymousBody=System.debug('Test')%3B');
req.setMethod('GET');
```

Retrieve Apex

To retrieve your Apex classes and triggers, and the global Apex classes and triggers from your installed managed packages:

```
req.setEndpoint('https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/apexManifest');
req.setMethod('GET');
```

Execute Apex Unit Tests

To execute Apex unit tests, use the `runTestsSynchronous` or `runTestsAsynchronous` resource. This example illustrates how to POST to the `runTestsSynchronous` resource using JavaScript. The comment blocks show which objects these calls return.

```
var xhttp = new XMLHttpRequest();
xhttp.open("POST",
"https://MyDomainName.my.salesforce.com/services/data/v59.0/tooling/runTestsSynchronous/",
true)

// SESSION_ID is the session ID
xhttp.setRequestHeader("Authorization", "OAuth <SESSION_ID>")
xhttp.setRequestHeader('Accept', "application/json");

// testObject should include a list of object(s) with the classId and list of
//      desired test methods for the desired classes to be tested
testObject = {tests: [{classId: "N0tARealClassId", testMethods: ["testMethod1",
"testMethod2"]}]}
requestObject = json.stringify(testObject);
response = xhttp.send(requestObject)
response = JSON.parse(response)

/*
{
  "successes": [
```

```

    {
      "namespace": null,
      "name": "MyTestClass",
      "methodName": "testMethod1",
      "id": "N0tARealTestId1",
      "time": 1167,
      "seeAllData": false
    },
    {
      "namespace": null,
      "name": "MyTestClass",
      "methodName": "testMethod2",
      "id": "N0tARealTestId2",
      "time": 47,
      "seeAllData": false
    }
  ],
  "failures": [
    {
      "type": "Class",
      "namespace": null,
      "name": "MyTestClass",
      "methodName": "testMethod3",
      "message": "System.AssertException: Assertion Failed",
      "stackTrace": "Class.MyTestClass.testMethod3: line 13, column 1",
      "id": "01pxx0000000JTpAAM",
      "seeAllData": false,
      "time": 27,
      "packageName": "MyTestClass"
    },
    {
      "type": "Class",
      "namespace": null,
      "name": "MyTestClass",
      "methodName": "testMethod4",
      "message": "System.AssertException: Assertion Failed",
      "stackTrace": "Class.MyTestClass.testMethod4: line 17, column 1",
      "id": "01pxx0000000JTpAAM",
      "seeAllData": false,
      "time": 32,
      "packageName": "MyTestClass"
    }
  ],
  "totalTime": 143,
  "apexLogId": "07Lxx0000000A9NEAU",
  "numFailures": 2,
  "codeCoverage": [

  ],
  "codeCoverageWarnings": [

  ],
  "numTestsRun": 4
}

```

```

*/

// Check how many tests ran
response["numTestRun"] === 4
// Check how many tests passed
response["successes"].length === 2

// Return a list of objects that correspond to the tests that passed
response["successes"]
/*
[
  {
    "id": "NOtARealTestId1",
    "methodName": "testMethod1",
    "name": "MyTestClass",
    "namespace": null,
    "seeAllData": false,
    "time": 1167
  }
]
*/

// Access the first object in the list
response["successes"][0]["name"] === "MyTestClass"
response["successes"][0]["methodName"] === "testMethod1"
// This ID refers to the classId
response["successes"][0]["id"] === "MyTestClass"
response["successes"][0]["time"] === 1167 // milliseconds

response["failures"]
/*
{
  "type": "Class",
  "namespace": null,
  "name": "MyTestClass",
  "methodName": "testMethod3",
  "message": "System.AssertException: Assertion Failed",
  "stackTrace": "Class.MyTestClass.testMethod3: line 13, column 1",
  "id": "01pxx0000000JTpAAM",
  "seeAllData": false,
  "time": 27,
  "packageName": "MyTestClass"
},
{
  "type": "Class",
  "namespace": null,
  "name": "MyTestClass",
  "methodName": "testMethod4",
  "message": "System.AssertException: Assertion Failed",
  "stackTrace": "Class.MyTestClass.testMethod4: line 17, column 1",
  "id": "01pxx0000000JTpAAM",
  "seeAllData": false,
  "time": 32,
  "packageName": "MyTestClass"
}
*/

```

```

    }
    */

response["failures"][0]["name"] === "MyTestClass"
response["failures"][0]["methodName"] === "testMethod3"
response["failures"][0]["message"] === "System.AssertException: Assertion Failed"
response["failures"][0]["stackTrace"] === "Class.MyTestClass.testMethod3: line 13, column 1"
response["failures"][0]["time"] === 27

```

REST Headers

Use REST if you're using a language that isn't strongly typed, like JavaScript.

For details on usage, syntax, and authentication, see the *REST API Developer Guide*.

REST headers available in the Tooling API WSDL are described in [REST Headers for Tooling API](#) on page 837.

For examples of REST headers being used, see [REST Header Examples](#).

REST Header Examples

Use these examples to understand REST headers.

REST headers in the Tooling API WSDL are described in [REST Headers for Tooling API](#) on page 837. For more details about REST Resources, see the *REST API Developer Guide*.

Examples

The following examples use Apex to execute REST requests with headers. You can use any standard REST tool to access Tooling REST API.



Note: The examples in this guide use a production login URL with *MyDomainName* in place of the org's My Domain name. The format for sandbox login URLs differs. To use these examples, update the login URL. You can find the My Domain name and My Domain login URL for your org on the My Domain page in Setup.

First, set up the connection to your org and the HTTP request type:

```

HttpRequest req = new HttpRequest();
req.setHeader('Authorization', 'Bearer ' + UserInfo.getSessionID());
req.setHeader('Content-Type', 'application/json');

```

At the end of each request, add the following code to send the request and retrieve the body of the response:

```

Http h = new Http();
HttpResponse res = h.send(req);
system.debug(res.getBody());

```

Improve Performance with the Composite Resource

Use the `/composite` resource to improve the performance of a development tool or app built with Tooling API. This resource executes a series of Tooling API requests in a single call, minimizing the number of round trips needed between the client and server. You can use the output of one request as the input to a subsequent request. The requests' response bodies and HTTP statuses are returned in a single response body. The entire request counts as a single call toward your API limits. Available in API version 40.0 and later.

For the most current API limit information, see the *Salesforce Developer Limits Quick Reference*. Contractual limits may also apply, as per your Salesforce contract.

The requests in a composite call are called *subrequests*. The subrequests are executed in the context of the same user.

In a subrequest's body, you specify a reference ID that maps to the subrequest's response. You can then refer to the ID in the `url` or `body` fields of later subrequests by using a JavaScript-like reference notation.

You can specify whether an error in a subrequest causes the entire composite request to roll back or just the subrequests that depend on it. You can also specify headers for each subrequest.

The following resources support composite.

- All sObject resources (`vXX.X/tooling/objects/`)
- The Query resource (`vXX.X/tooling/query/?q=soql`)



Note: You can have up to 25 subrequests in a single call. Up to five of these subrequests can be query operations.

URI

`/vXX.X/composite`

Formats

JSON

HTTP method

GET (lists other available composite resources), POST

Authentication

Authorization: Bearer *token*

Parameters

None required

Request body

[Composite Request Body](#)

Response body

[Composite Response Body](#)



Example: The following composite request body includes five subrequests.

- The first subrequest creates a MetadataContainer.
- The second subrequest creates an ApexClassMember.
- The third subrequest creates a ContainerAsyncRequest and starts the asynchronous deployment process.
- The fourth subrequest gets the created ContainerAsyncRequest.
- The fifth subrequest gets the created MetadataContainer.

The five subrequests count as a single call toward the API limit.

```
{
  "allOrNone": false,
  "compositeRequest": [
    {
      "method": "POST",
      "body": {
        "Name": "MetadataContainer Unique Name"
      },
      "url": "/services/data/v40.0/tooling/objects/metadatacontainer/"
    }
  ]
}
```

```

    "referenceId": "metadatacontainer_reference_id"
  },
  {
    "method": "POST",
    "body": {
      "contententityid": "<ID of an ApexClass you want to update>" ,
      "fullname": "ApexClassMemberUniqueFullName",
      "body": "public class Classtest2test {}",
      "MetadataContainerId": "@{metadatacontainer_reference_id.id}"
    },
    "url": "/services/data/v40.0/tooling/subjects/apexclassmember/",
    "referenceId": "apexclassmember_reference_id"
  },
  {
    "method": "POST",
    "body": {
      "IsCheckOnly": "false",
      "MetadataContainerId": "@{metadatacontainer_reference_id.id}"
    },
    "url": "/services/data/v40.0/tooling/subjects/containerasyncrequest/",
    "referenceId": "containerasyncrequest_reference_id"
  },
  {
    "method": "GET",

"url": "/services/data/v40.0/tooling/subjects/containerasyncrequest/{containerasyncrequest_reference_id.id}",

    "referenceId": "containerasyncrequest_GET_reference_id"
  },
  {
    "method": "GET",

"url": "/services/data/v40.0/tooling/subjects/metadatacontainer/{metadatacontainer_reference_id.id}",

    "referenceId": "metadatacontainer_GET_reference_id"
  }
]
}

```

IN THIS SECTION:

[Composite Request Body](#)

Describes a collection of subrequests to execute with the `/composite` resource.

[Composite Response Body](#)

Describes the result of a `/composite` request.

SEE ALSO:

[REST API Developer Guide](#)

Composite Request Body

Describes a collection of subrequests to execute with the `/composite` resource.

Composite Collection Input

The request body contains an `allOrNone` flag that specifies how to roll back errors and a `compositeRequest` collection that includes subrequests to execute.

Properties

| Name | Type | Description | Required or Optional |
|-------------------------------|---|---|----------------------|
| <code>allOrNone</code> | Boolean | Specifies what to do when an error occurs while processing a subrequest. If the value is <code>true</code> , the entire composite request is rolled back. If the value is <code>false</code> , the remaining subrequests that don't depend on the failed subrequest are executed. Dependent subrequests aren't executed. In either case, the top-level request returns HTTP 200 and includes responses for each subrequest. | Optional |
| <code>compositeRequest</code> | Composite Subrequest [] | Collection of subrequests to execute. | Required |

JSON example

```
{
  "allOrNone" : true,
  "compositeRequest" : [{
    Composite Subrequest
  }, {
    Composite Subrequest
  }, {
    Composite Subrequest
  }]
}
```

Composite Subrequest

Contains the resource, method, headers, body, and reference ID for the subrequest.

Properties

| Name | Type | Description | Required or Optional |
|-------------------|---------------------------------|------------------------------------|----------------------|
| <code>body</code> | The type depends on the request | The input body for the subrequest. | Optional |

| Name | Type | Description | Required or Optional |
|--------------------------|--|--|----------------------|
| | | specified in the <code>url</code> property. | |
| <code>httpHeaders</code> | <code>Map<String, String></code> | <p>Request headers and their values to include with the subrequest. You can include any header supported by the requested resource, except for the following headers because the subrequests inherit their values from the top-level request.</p> <ul style="list-style-type: none"> • <code>Accept</code> • <code>Authorization</code> • <code>Content-Type</code> <p>If you specify these headers in a subrequest, the top-level request fails and returns an HTTP 400 response.</p> | Optional |
| <code>method</code> | <code>String</code> | <p>The method to use with the requested resource. Possible values are <code>POST</code>, <code>PUT</code>, <code>PATCH</code>, <code>GET</code>, and <code>DELETE</code> (case sensitive). For a list of valid methods, see the documentation for the requested resource.</p> | Required |
| <code>referenceId</code> | <code>String</code> | <p>Reference ID that maps to the subrequest's response and can be used to reference the response in later subrequests.</p> <p>You can include the <code>referenceId</code> in either the body or URL of a subrequest. Use this syntax to include a reference: <code>@{referenceId.FieldName}</code>.</p> <p>The <code>referenceId</code> is case sensitive.</p> <p>You can use two operators with the reference ID.</p> <p>The <code>.</code> operator references a field on a JSON object in the response. The <code>[]</code> operator indexes a JSON collection in the response. You can use each operator recursively as long as it makes sense in the context of the response.</p> | Required |
| <code>url</code> | <code>String</code> | <p>The resource to request.</p> <ul style="list-style-type: none"> • The URL can include any query string parameters that the subrequest supports. The query string must be URL-encoded. • The URL must start with <code>/services/data/vXX.X/tooling</code>. • You can use parameters to filter response bodies. | Required |

Usage

Because `referenceId` is case sensitive, make sure that the case of the field that you're referring to is correct. The same field can use different cases in different contexts.



Note: You can have up to 25 subrequests in a single call. Up to five of these subrequests can be query operations.

Composite Response Body

Describes the result of a `/composite` request.

Composite Results

Properties

| Name | Type | Description |
|--------------------------------|--|----------------------------------|
| <code>compositeResponse</code> | Composite Subrequest Result [] | Collection of subrequest results |

JSON Example

```
{
  "compositeResponse" : [{
    Composite Subrequest Result
  }, {
    Composite Subrequest Result
  }, {
    Composite Subrequest Result
  }]
}
```

Composite Subrequest Result

Properties

| Name | Type | Description |
|-----------------------------|--|---|
| <code>body</code> | The type depends on the response type of the subrequest. | The response body of this subrequest. If the subrequest returns an error, the body includes the error code and message. |
| <code>httpHeaders</code> | <code>Map<String, String></code> | Response headers and their values for this subrequest. The <code>/composite</code> resource doesn't support the Content-Length header, so subrequest responses don't include this header and neither does the top-level response. |
| <code>httpStatusCode</code> | Integer | An HTTP status code for this subrequest. If <code>allOrNone</code> is set to <code>true</code> in the composite request and a subrequest returns an error, all other subrequests return the 400 HTTP status code. |
| <code>referenceID</code> | String | The reference ID specified in the subrequest. Use this property to associate subrequests with their results. |

JSON example

```
{
  "body" : {
```

```

    "id" : "001R00000033I6AIAU",
    "success" : true,
    "errors" : [ ]
  },
  "httpHeaders" : {
    "Location" :
"/services/data/v40.0/tooling/subjects/apexclassmember/001R00000033I6AIAU"
  },
  "statusCode" : 201,
  "referenceId" : "apexclassmember_reference_id"
}

```

Group Operations for Fewer Round Trips with SObject Collections

Executes actions on multiple records in one request. Use SObject Collections to reduce the number of round-trips between the client and server. This resource is available in API version 45.0 and later.

 **Note:** Let us know in [IdeaExchange](#) which Tooling API objects you'd like to see supported by SObject Collections.

URI

The URI to use depends on the operation.

Create

POST /vXX.X/composite/subjects

Retrieve

GET

/vXX.X/composite/subjects/*SubjectName*?ids=*recordId1, recordId2*&fields=*fieldname1, fieldname2*

Update

PATCH /vXX.X/composite/subjects

Delete

DELETE /vXX.X/composite/subjects?ids=*recordId1, recordId2*

Formats

JSON, XML

HTTP method

GET, DELETE, PATCH, POST

Authentication

Authorization: Bearer *token*

The parameters, request body, and response body you use depend on the operation. For details, see the specific operation.

IN THIS SECTION:

[Create Multiple Records with Fewer Round-Trips](#)

Use a POST request with sObject Collections to add multiple records, returning a list of SaveResult objects. You can choose whether to roll back the entire request when an error occurs.

[Retrieve Multiple Records with Fewer Round-Trips](#)

Use a GET or POST request with sObject Collections to retrieve one or more records of the same object type. A list of sObjects that represents the individual records of the specified type is returned. The number of sObjects returned matches the number of IDs passed in the request.

[Update Multiple Records with Fewer Round-Trips](#)

Use a PATCH request with sObject Collections to update multiple records, returning a list of SaveResult objects. You can choose whether to roll back the entire request when an error occurs.

[Delete Multiple Records with Fewer Round-Trips](#)

Use a DELETE request with sObject Collections to delete multiple records, returning a list of DeleteResult objects. You can choose to roll back the entire request when an error occurs.

Create Multiple Records with Fewer Round-Trips

Use a POST request with sObject Collections to add multiple records, returning a list of SaveResult objects. You can choose whether to roll back the entire request when an error occurs.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.

Request Syntax

POST /vXX.X/composite/sobjects

Parameters

| Parameter | Description |
|------------------------|---|
| <code>allOrNone</code> | Optional. Indicates whether to roll back the entire request when the creation of any object fails (<code>true</code>) or to continue with the independent creation of other objects in the request. The default is <code>false</code> . |
| <code>records</code> | Required. A list of sObjects. In a POST request using sObject Collections, set the <code>type</code> attribute for each object, but don't set the <code>id</code> field for any object. |

Usage Guidelines

- The maximum number of objects in the list can be different for each Tooling API object.
- The list can contain objects of different types, including custom objects.
- Each object must contain an attributes map. The map must contain a value for `type`.
- Objects are created in the order they're listed. The SaveResult objects are returned in the order in which the create requests were specified.
- If the request body includes objects of more than one type, they're processed as chunks. For example, if the incoming objects are `{account1, account2, contact1, account3}`, the request is processed in three chunks: `{{account1, account2}, {contact1}, {account3}}`. A single request can process up to 10 chunks.
- Although SObject Collections is also supported in SOAP API, you can't use SOAP API objects in a Tooling API SObject Collections call.

Checking for Errors

- If the request isn't well formed, the API returns a `400 Bad Request` HTTP Status. Fix the syntax of the request and try again.
- If the request is well formed, the API returns a `200 OK` HTTP Status. If an item was processed successfully, the `success` flag shows for that item. Error information is returned in the `errors` array.

Retrieve Multiple Records with Fewer Round-Trips

Use a GET or POST request with sObject Collections to retrieve one or more records of the same object type. A list of sObjects that represents the individual records of the specified type is returned. The number of sObjects returned matches the number of IDs passed in the request.

You can specify approximately 800 IDs before the URL length causes the HTTP 414 error `URI too long`. To retrieve more records than the URL length can accommodate, use a POST request to retrieve up to 2,000 records of the same object type. If you use POST, the IDs and fields of the records to retrieve are specified in the request body.

Request Syntax

If you're using a GET request, use the following syntax, where *SObjectName* is the object type of the records from which you're retrieving data.

GET

`/vXX.X/composite/objects/SObjectName?ids=recordId1,recordId2&fields=fieldname1,fieldname2`

If you're using a POST request, use the following syntax, where *SObjectName* (required) is the object type of the records from which you're retrieving data.

```
POST /composite/objects/SObjectName
{
  "ids" : ["recordId1", "recordId2", "recordId3"],
  "fields" : ["fieldname1", "fieldname2"]
}
```

Parameters

| Parameter | Description |
|---------------------|---|
| <code>ids</code> | Required. A list of one or more IDs of the objects to return. All IDs must belong to the same object type. |
| <code>fields</code> | Required. A list of fields to include in the response. The field names you specify must be valid, and you must have read-level permissions to each field. |

Usage Guidelines

- If you specify an invalid field name or a field name that you don't have permission to read, HTTP 400 `Bad Request` is returned.
- If you don't have access to an object, or if a passed ID is invalid, the array returns null for that object.

Request Example

If you're using a GET request, use the syntax shown in the following example.

GET

`/composite/objects/SObjectName?ids=001xx000003DGB1AAG,001xx000003DGB0AAG,001xx000003DGB9AAG&fields=id`

If you're using a POST request, use a request body as shown in the following example.

```
POST /composite/objects/SObjectName
{
```


```
{
  "ids" : ["001xx000003DGb1AAG", "001xx000003DGb0AAG", "001xx000003DGb9AAG"],
  "fields" : ["id"]
}
```

Response Body Example

```
[
  {
    "attributes" : {
      "type" : "SObjectName",
      "url" : "/services/data/v45.0/subjects/SObjectName/001xx000003DGb1AAG"
    },
    "Id" : "001xx000003DGb1AAG"
  },
  {
    "attributes" : {
      "type" : "SObjectName",
      "url" : "/services/data/v45.0/tooling/subjects/SObjectName/001xx000003DGb0AAG"
    },
    "Id" : "001xx000003DGb0AAG"
  }
]
```

Update Multiple Records with Fewer Round-Trips

Use a PATCH request with sObject Collections to update multiple records, returning a list of SaveResult objects. You can choose whether to roll back the entire request when an error occurs.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.

Request Syntax

PATCH /vXX.X/composite/subjects

Parameters

| Parameter | Description |
|-----------|--|
| allOrNone | Optional. Indicates whether to roll back the entire request when the update of any object fails (<code>true</code>) or to continue with the independent update of other objects in the request. The default is <code>false</code> . |
| records | Required. A list of sObjects. In a POST request using sObject Collections, set the <code>type</code> attribute for each object. You can set either the <code>id</code> field or, if available, the <code>FullName</code> field for any object. |

Usage Guidelines

- The maximum number of objects in the list can be different for each Tooling API object.

- The list can contain objects of different types, including custom objects.
- Each object must contain an attributes map. The map must contain a value for `type`.
- If the object has a `Metadata` field, you can specify either an `id` field with a valid ID value or the `FullName` field. If the object doesn't have a `Metadata` field, the `id` field with a valid ID value is required.
- Objects are updated in the order they're listed. The `SaveResult` objects are returned in the order in which the update requests were specified.
- If the request body includes objects of more than one type, they're processed as chunks. For example, if the incoming objects are `{objectA1, objectA2, objectB1, objectA3}`, the request is processed in three chunks: `{objectA1, objectA2}`, `{objectB1}`, `{objectA3}`. A single request can process up to 10 chunks.
- Although SObject Collections is also supported in SOAP API, you can't use SOAP API objects in a Tooling API SObject Collections call.

Checking for Errors

- If the request isn't well formed, the API returns a `400 Bad Request` HTTP Status. Fix the syntax of the request and try again.
- If the request is well formed, the API returns a `200 OK` HTTP Status. If an item was processed successfully, the `success` flag shows for that item. Error information is returned in the `errors` array.

Response Body Examples

This example shows a response when all the items were processed successfully.

```
HTTP/1.1 200 OK

[
  {
    "id" : "001RM000003oCprYAE",
    "success" : true,
    "errors" : [ ]
  },
  {
    "id" : "003RM0000068og4YAA",
    "success" : true,
    "errors" : [ ]
  }
]
```

This example shows a response when some items caused errors and `allOrNone` is `false`.

```
HTTP/1.1 200 OK

[
  {
    "id": "001RM000003oCprYAE",
    "success": true,
    "errors": [

    ]
  },
  {
    "success": false,
    "errors": [
      {
        "statusCode": "MALFORMED_ID",
```



```

        "message": "Duplicate Fullname",
        "fields": [
            "Id"
        ]
    }
]
}
]

```

This example shows a response when some items caused errors and `allOrNone` is true.

```

HTTP/1.1 200 OK
[
  {
    "id" : "001RM000003oCprYAE",
    "success" : false,
    "errors" : [
      {
        "statusCode" : "ALL_OR_NONE_OPERATION_ROLLED_BACK",
        "message" : "Record rolled back because not all records were valid and the request
was using AllOrNone header",
        "fields" : [ ]
      }
    ]
  },
  {
    "success" : false,
    "errors" : [
      {
        "statusCode" : "MALFORMED_ID",
        "message" : "Duplicate Fullname",
        "fields" : [
          "Id"
        ]
      }
    ]
  }
]

```

Delete Multiple Records with Fewer Round-Trips

Use a DELETE request with sObject Collections to delete multiple records, returning a list of DeleteResult objects. You can choose to roll back the entire request when an error occurs.

Request Syntax

DELETE /vXX.X/composite/subjects?ids=**recordId, recordId**

Parameters

| Parameter | Description |
|------------------------|---|
| <code>allOrNone</code> | Optional. Indicates whether to roll back the entire request when the deletion of any object fails (<code>true</code>) or to continue with the independent deletion of other objects in the request. The default is <code>false</code> . |
| <code>ids</code> | Required. A list of IDs of objects to be deleted. The IDs can belong to different object types, including custom objects. |

Usage Guidelines

- The `DeleteResult` objects are returned in the order in which the IDs of the deleted objects were specified.
- You can't delete records for multiple object types in one call when one of those types is related to a feature in the Salesforce Setup area.

Checking for Errors

- If the request isn't well formed, the API returns a `400 Bad Request` HTTP Status. Fix the syntax of the request and try again.
- If the request is well formed, the API returns a `200 OK` HTTP Status. If an item was processed successfully, the `success` flag shows for that item. Error information is returned in the `errors` array.

Request Example

```
DELETE //composite/subjects?ids=001xx000003Dgb2AAG,003xx000004TmiQAAS&allOrNone=false
```

Response Body Examples

This example shows a response when all the items were processed successfully.

```
HTTP/1.1 200 OK

[
  {
    "id" : "001RM000003oLrHYAU",
    "success" : true,
    "errors" : [ ]
  },
  {
    "id" : "001RM000003oLraYAE",
    "success" : true,
    "errors" : [ ]
  }
]
```

This example shows a response when some items caused errors and `allOrNone` is `false`.

```
HTTP/1.1 200 OK

[
  {
```

```

    "id": "001RM000003oCprYAE",
    "success": true,
    "errors": [
      ]
    },
    {
      "success": false,
      "errors": [
        {
          "statusCode": "MALFORMED_ID",
          "message": "Duplicate Fullname",
          "fields": [
            "Id"
          ]
        }
      ]
    }
  ]
}
]

```

This example shows a response when some items caused errors and `allOrNone` is `true`.

```

HTTP/1.1 200 OK
[
  {
    "id" : "001RM000003oCprYAE",
    "success" : false,
    "errors" : [
      {
        "statusCode" : "ALL_OR_NONE_OPERATION_ROLLED_BACK",
        "message" : "Record rolled back because not all records were valid and the request
was using AllOrNone header",
        "fields" : [ ]
      }
    ]
  },
  {
    "success" : false,
    "errors" : [
      {
        "statusCode" : "MALFORMED_ID",
        "message" : "Duplicate Fullname",
        "fields" : [
          "Id"
        ]
      }
    ]
  }
]
}
]

```

API End-of-Life Policy

See which Tooling REST and SOAP API versions are supported, unsupported, or unavailable.

Salesforce is committed to supporting each API version for a minimum of 3 years from the date of first release. To mature and improve the quality and performance of the API, versions that are over 3 years old sometimes are no longer supported.

Salesforce notifies customers who use an API version scheduled for deprecation at least 1 year before support for the version ends.

| Salesforce API Versions | Version Support Status | Version Retirement Info |
|----------------------------|--|---|
| Versions 31.0 through 59.0 | Supported. | |
| Versions 21.0 through 30.0 | As of Summer '22, these versions have been deprecated and no longer supported by Salesforce. Starting Summer '25, these versions will be retired and unavailable. | Salesforce Platform API Versions 21.0 through 30.0 Retirement |
| Versions 7.0 through 20.0 | As of Summer '22, these versions are retired and unavailable. | Salesforce Platform API Versions 7.0 through 20.0 Retirement |

If you request any resource or use an operation from a retired API version, REST API returns the `410 : GONE` error code.

If you request any resource or use an operation from a retired API version, SOAP API returns `500 : UNSUPPORTED__API__VERSION` error code.

To identify requests made from old or unsupported API versions, use the [API Total Usage](#) event type.

CHAPTER 2 SOAP Calls

Use SOAP if you're using a strongly typed language like Java that generates Web service client code. For details about usage, syntax, and authentication, see the *SOAP API Developer Guide*.

To access the Tooling API WSDL, from Setup, enter *API* in the **Quick Find** box, then select **API** and click **Generate Tooling WSDL**.

Like the Salesforce SOAP API, Tooling API uses the following calls.

create()

Adds one or more records to your organization's data. When creating objects with the Metadata field, only one object can be processed in a request.

delete()

Deletes one or more records from your organization's data.

describeLayout()

Retrieve metadata about page layouts for a specified SOjbject.

describeGlobal()

Lists the available Tooling API objects and their metadata.

describeSObjects()

Describes the metadata (field list and object properties) for the specified object or array of objects.

Call `describeGlobal()` to retrieve a list of all Tooling API objects for your organization, then iterate through the list and use `describeSObjects()` to obtain metadata about individual objects.

describeValueType()

Describes the metadata for a specified namespace and value type. For information about `describeValueType`, see the *Metadata API Developer Guide*.

describeWorkitemActions()

Describes which actions are available for a specified work item.

executeanonymous(string apexcode)

Executes the specified block of Apex anonymously and returns the result.

query()

Executes a query against a Tooling API object and returns data that matches the specified criteria.

queryMore()

Retrieves the next batch of objects from a `query()`.

retrieve()

Retrieves one or more records based on the specified IDs.

runTests()

Runs one or more methods within an Apex class, using the synchronous test execution mechanism. All test methods in a synchronous test run must be in the same class.

The synchronous `runTests()` call accepts a `RunTestsRequest` object.

For sample code and more information, see `runTests()`.

runTestsAsynchronous ()

Runs one or more methods within one or more Apex classes, using the asynchronous test execution mechanism.

This example shows a call to a class that calls the `runTestsAsynchronous` endpoint.

```
conn.runTestsAsynchronous(classIds, suiteIds, maxFailedTests,
    testLevel.value,
    classNames, suiteNames, tests, skipCodeCoverage)
```

For more `runTestsAsynchronous ()` example code, see [ApexTestQueueItem](#).

All parameters are mandatory. To provide values for only some parameters, specify the others as `null`.

- The `classIds`, `suiteIds`, `classNames`, and `suiteNames` parameters must all be specified. To provide values for only some of these parameters, specify the others as `null`. To use `TestLevel.RunLocalTests` or `TestLevel.RunAllTestsInOrg`, specify all class- and suite-related parameters as `null`.
- A value for `maxFailedTests` is mandatory. To allow all tests in your org to run, regardless of how many tests fail, set `maxFailedTests` to `-1`. To stop the test run from executing new tests after a given number of tests fail, set `maxFailedTests` to an integer value from 0 to 1,000,000. This integer value sets the maximum allowable test failures. A value of 0 causes the test run to stop if any failure occurs. A value of 1 causes the test run to stop on the second failure, and so on. Keep in mind that high values can cause slow performance. Each 1,000 tests that you add to your `maxFailedTests` value adds about 3 seconds to your test run, not including the time that the tests take to execute.
- The `testLevel` parameter is available and required in API version 37.0 and later, but its value can be `null`. Other permissible values include:

RunSpecifiedTests

Only the tests that you specify are run.

RunLocalTests

All tests in your org are run, except the ones that originate from installed managed packages.

Omit identifiers for specific tests when you use this value.

RunAllTestsInOrg

All tests are run. The tests include all tests in your org, including tests of managed packages.

Omit identifiers for specific tests when you use this value.

- The `tests` parameter is available and required in API version 41.0 and later, but its value can be `null`. This property is an array of type [TestsNode](#).
- The `skipCodeCoverage` parameter is available in API version 43.0 and later, but its value can be `null`. This property is a boolean that indicates whether to opt out of collecting code coverage information during the test run.

search ()

Search for records that match a specified text string.

update ()

Updates one or more existing records in your org's data. When updating objects with the Metadata field, only one object can be updated per request.

upsert()

Creates records and updates existing records; uses a custom field to determine the presence of existing records. To upsert objects with the Metadata field, pass in only one object per request.

SOAP Headers

The SOAP headers available in the Tooling API WSDL are described in [SOAP Headers for Tooling API](#).

Examples

These examples use C#, but you can use any language that supports Web services.

To compile Apex classes or triggers in Developer Edition or sandbox organizations, use `create()`. The next sample uses [ApexClass](#) to compile a simple class with a single method called `SayHello`.


```
String classBody = "public class Messages {\n"
    + "public string SayHello() {\n"
    + "    return 'Hello';\n" + "}\n"
    + "}";

// create an ApexClass object and set the body
ApexClass apexClass = new ApexClass();
apexClass.Body = classBody;
ApexClass[] classes = { apexClass };

// call create() to add the class
SaveResult[] saveResults = sforce.create(classes);
for (int i = 0; i < saveResults.Length; i++)
{
    if (saveResults[i].success)
    {
        Console.WriteLine("Successfully created Class: " +
            saveResults[i].id);
    }
    else
    {
        Console.WriteLine("Error: could not create Class ");
        Console.WriteLine("    The error reported was: " +
            saveResults[i].errors[0].message + "\n");
    }
}
```

The `IsCheckOnly` parameter on [ContainerAsyncRequest](#) indicates whether an asynchronous request compiles code but doesn't execute or save it (`true`), or compiles and save the code (`false`).

The next example expands upon the first by modifying the `SayHello()` method to accept a person's first and last name. This example uses [MetadataContainer](#) with [ApexClassMember](#) to retrieve and update the class, and [ContainerAsyncRequest](#) to compile and deploy the changes to the server. You can use the same method with [ApexTriggerMember](#), [ApexComponentMember](#), and [ApexPageMember](#).

 **Note:** To test your code, modify the `IsCheckOnly` parameter in the next sample, and log in to your organization after a successful execution to verify the results.

- When `IsCheckOnly = true`, the `SayHello()` method remains the same. `ApexClassMember` contains the compiled results, but the class on the server remains the same.
- When `IsCheckOnly = false`, the `SayHello()` method shows the change to accept a person's first and last name.

```
String updatedClassBody = "public class Messages {\n"
    + "public string SayHello(string fName, string lName) {\n"
    + "    return 'Hello ' + fName + ' ' + lName;\n" + "}\n"
    + "}";

//create the metadata container object
MetadataContainer Container = new MetadataContainer();
Container.Name = "SampleContainer";

MetadataContainer[] Containers = { Container };
SaveResult[] containerResults = sforce.create(Containers);
if (containerResults[0].success)
{
    String containerId = containerResults[0].id;

    //create the ApexClassMember object
    ApexClassMember classMember = new ApexClassMember();
    //pass in the class ID from the first example
    classMember.ContentEntityId = classId;
    classMember.Body = updatedClassBody;
    //pass the ID of the container created in the first step
    classMember.MetadataContainerId = containerId;
    ApexClassMember[] classMembers = { classMember };

    SaveResult[] MembersResults = sforce.create(classMembers);
    if (MembersResults[0].success)
    {
        //create the ContainerAsyncRequest object
        ContainerAsyncRequest request = new ContainerAsyncRequest();
        //if the code compiled successfully, save the updated class
        to the server
        //change to IsCheckOnly = true to compile without saving
        request.IsCheckOnly = false;
        request.MetadataContainerId = containerId;
        ContainerAsyncRequest[] requests = { request };
        SaveResult[] RequestResults = sforce.create(requests);
        if (RequestResults[0].success)
        {
            string requestId = RequestResults[0].id;

            //poll the server until the process completes
            QueryResult queryResult = null;
            String soql = "SELECT Id, State, ErrorMsg
                FROM ContainerAsyncRequest
                Where id = '" + requestId + "'";
            queryResult = sforce.query(soql);
```



```

        if (queryResult.size > 0)
        {
            ContainerAsyncRequest _request =
(ContainerAsyncRequest)queryResult.records[0];
            while (_request.State.ToLower() == "queued")
            {
                //pause the process for 2 seconds
                Thread.Sleep(2000);

                //poll the server again for completion
                queryResult = sforce.query(soql);
                _request =
(ContainerAsyncRequest)queryResult.records[0];
            }

            //now process the result
            switch (_request.State)
            {
                case "Invalidated":
                    break;

                case "Completed":
                    //class compiled successfully
                    //see the next example on how to process the
SymbolTable
                    break;

                case "Failed":
                    . . . break;

                case "Error":
                    break;

                case "Aborted":
                    break;

            }
        }
        else
        {
            //no rows returned
        }
    }
    else
    {
        Console.WriteLine("Error: could not create
ContainerAsyncRequest object");
        Console.WriteLine("    The error reported was: " +
RequestResults[0].errors[0].message + "\n");
    }
}
else
{
    Console.WriteLine("Error: could not create Class Member ");
}

```

```

        Console.WriteLine("    The error reported was: " +
            MembersResults[0].errors[0].message + "\n");
    }
}
else
{
    .. Console.WriteLine("Error: could not create MetadataContainer
");
    Console.WriteLine("    The error reported was: " +
        containerResults[0].errors[0].message + "\n");
}
}

```

To access Apex class and trigger data in a structured format, use a [SymbolTable](#).

The next sample queries the [ApexClassMember](#) object created in the previous example to obtain the [SymbolTable](#) of the modified class.



Note: The SOQL statement used depends on when the data is retrieved.

- To execute the query from within the previous sample, use the ID of the [ContainerAsyncRequest](#). For example, `SELECT Body, ContentEntityId, SymbolTable FROM ApexClassMember where MetadataContainerId = ''' + requestId + '''`
- Otherwise, use the ID of the modified class as shown in the next sample. For example, `SELECT ContentEntityId, SymbolTable FROM ApexClassMember where ContentEntityId = ''' + classId + '''`

```

//use the ID of the class from the previous step
string classId = "01pA00000036itIIAQ";
QueryResult queryResult = null;
String soql = "SELECT ContentEntityId, SymbolTable FROM
ApexClassMember where ContentEntityId = ''' + classId + '''";

queryResult = sforce.query(soql);
if (queryResult.size > 0)
{
    ApexClassMember apexClass =
(ApexClassMember)queryResult.records[0];
    SymbolTable symbolTable = apexClass.SymbolTable;

    foreach (Method _method in symbolTable.methods)
    {
        //here's the SayHello method
        String _methodName = _method.name;

        //report the modifiers on the method such as global, public,
private, or static
        String _methodVisibility = _method.modifiers;

        //get the method's return type
        string _methodReturnType = _method.returnType;

        //get the fName & lName parameters
    }
}

```

```

        foreach (Parameter _parameter in _method.parameters)
        {
            string _paramName = _parameter.name;
            string _parmType = _parameter.type;
        }
    }
}
else
{
    //unable to locate class
}

```

To add checkpoints to your code for debugging, use [ApexExecutionOverlayAction](#).

This sample adds a checkpoint to the class from the previous samples:

```

//use the ID of the class from the first sample.
string classId = "01pA00000036itIIAQ";

ApexExecutionOverlayAction action = new
ApexExecutionOverlayAction();
action.ExecutableEntityId = classId;
action.Line = 3;
action.LineSpecified = true;
action.Iteration = 1;
action.IterationSpecified = true;
ApexExecutionOverlayAction[] actions = { action };

SaveResult[] actionResults = sforce.create(actions);
if (actionResults[0].success)
{
    // checkpoint created successfully
}
else
{
    Console.WriteLine("Error: could not create Checkpoint ");
    Console.WriteLine("    The error reported was: " +
        actionResults[0].errors[0].message + "\n");
}

```

SEE ALSO:

[Tooling API Objects](#)

[SOAP API Developer Guide](#)

CHAPTER 3 Tooling API Objects and Namespaces

Tooling API objects provide programmatic access to data and metadata. The Tooling API WSDL includes four namespaces.

| Namespace | Used for | Prefix |
|---|--|------------------|
| <code>object.tooling.soap.sforce.com</code> | Tooling API sObjects. Some sObjects have a Metadata field defined in the <code>mns</code> namespace. This namespace is available in API version 37.0 and later. | <code>ens</code> |
| <code>fault.tooling.soap.sforce.com</code> | Tooling API error codes. This namespace is available in API version 37.0 and later. | <code>fns</code> |
| <code>tooling.soap.sforce.com</code> | General complex types, describe results, and all enum types in the Tooling API. | <code>tns</code> |
| <code>metadata.tooling.soap.sforce.com</code> | Objects and types that occur in both the Metadata API WSDL and the Tooling API WSDL. Elements in the two WSDLs might be defined differently. | <code>mns</code> |

Objects and types that are identical in the Tooling API and Metadata API WSDLs are documented in the Metadata API Developer Guide.

Objects and types that are different in the Tooling API WSDL or occur only in the Tooling API WSDL are documented in this guide.

Frequently occurring system fields are described in [System Fields](#) on page 38. You can verify the complete list of fields for an object by generating and reviewing the Tooling API WSDL.

Object Quick-Reference Tables, System Fields, and SOQL Limitations

Learn about objects, system fields that occur on most objects, and SOQL limitations that apply to some objects in Tooling API. An alphabetical list of objects is also available.

IN THIS SECTION:

[SOQL Operation Limitations](#)

Some Tooling API objects have SOQL limitations.

[SOSL Operation Limitations](#)

Two Tooling API objects, `EntityDefinition` and `FieldDefinition`, have some SOSL limitations. `ExternalString` and `MetadataComponentDependency` (Beta) don't support SOSL searches.

Considerations for CRUD Operations in Active Orgs

CRUD operations on most Tooling API objects are allowed in active orgs in API version 41.0 and later, just as they are in other kinds of orgs. However, for performance reasons you can't perform CRUD operations in an active org for some Tooling API objects.

Allow Metadata Save Operations to Complete with Returned Warnings

When a metadata save operation generates warnings, the default behavior of Tooling API is to fail the operation without returning the warnings. For objects in both the Tooling API and Metadata API WSDLs, you can indicate that you want error-free save operations to complete successfully, returning any warnings.

System Fields

Some fields are system-generated. They are on most Tooling API objects, and are read-only.

ApiFault Element

An `ApiFault` element contains information about a fault that occurs when processing a service request.

Programming Objects

Use programming objects to interact with programmatic artifacts: Apex, Visualforce, and Lightning.

Setup Objects

Use setup objects to interact with metadata for declarative development. For example, you can create your own version of Setup, or restrict the amount of data required to push to an app to a mobile phone.

Tooling Objects

Use these objects to build tools around test results, debugging, code coverage, and more.

Operational Objects

Use the following objects for Tooling API operations.

SOQL Operation Limitations

Some Tooling API objects have SOQL limitations.

These objects in Tooling API don't support SOQL operations `COUNT()`, `GROUP BY`, `LIMIT`, `LIMIT OFFSET`, `OR`, `NOT`, and `INCLUDES`.

- CompactLayoutInfo
- CompactLayoutItemInfo
- DataType
- EntityDefinition
- EntityLimit
- EntityParticle
- FieldDefinition
- Publisher
- RelationshipDomain
- RelationshipInfo
- SearchLayout
- ServiceFieldDataType
- StandardAction
- TimeSheetTemplate
- UserEntityAccess

- UserFieldAccess

The unsupported operations for these objects return errors or incorrect results, as these examples illustrate.

GROUP BY

Example Query: `SELECT COUNT(qualifiedapiname), isfeedenabled FROM EntityDefinition GROUP BY isfeedenabled`

Error Returned: The requested operation is not yet supported by this SObject storage type, contact salesforce.com support for more information.

LIMIT, LIMIT OFFSET

Example Queries:

`SELECT qualifiedapiname FROM EntityDefinition LIMIT 5`

`SELECT qualifiedapiname FROM EntityDefinition LIMIT 5 OFFSET 10`

An incorrect result is returned because LIMIT and LIMIT OFFSET are ignored.

NOT

Example Query: `SELECT qualifiedapiname FROM EntityDefinition WHERE qualifiedapiname != 'Account'`

Error Returned: Only equals comparisons permitted

OR

Example Query: `SELECT qualifiedapiname, keyprefix FROM EntityDefinition WHERE isdeletable=true OR (isfeedenabled=false AND keyprefix='01j')`

Error Returned: Disjunctions not supported

ORDER BY

Example Query: `SELECT EntityDefinition.DeveloperName, ValidationName, Active, Description, ErrorDisplayField, ErrorMessage FROM ValidationRule ORDER BY EntityDefinition.DeveloperName ASC, ValidationName ASC`

Error Returned: `ERROR: relation "core.virtual_standard_entity_data_template" does not exist`

You can always order by fields of the object that you're querying, but you can get an error when you order by the fields of a joined object.

INCLUDES

Example Query: `SELECT ComplianceGroup FROM FieldDefinition WHERE EntityDefinitionId = 'Account' AND ComplianceGroup includes('GDPR')`

Error Returned: Unsupported filter type

MetadataComponentDependency (Pilot) doesn't support GROUP BY or aggregate functions other than COUNT().

SOSL Operation Limitations

Two Tooling API objects, EntityDefinition and FieldDefinition, have some SOSL limitations. ExternalString and MetadataComponentDependency (Beta) don't support SOSL searches.

EntityDefinition and FieldDefinition

EntityDefinition and FieldDefinition support the following SOSL operations:

FIND

- Literal text search, for example:

```
FIND {account}
```

- Text search with a single wildcard, for example:

```
FIND {account*} RETURNING EntityDefinition
FIND {account?} RETURNING FieldDefinition
FIND {account*fax} RETURNING EntityDefinition
FIND {account?fax} RETURNING FieldDefinition
```

The wildcard can't be the first character in a search term, consistent with search behavior for all objects.

- Quotation marks are supported.
- The escape character \ (slash) is supported. For example, to search for the character * (asterisk), include the escape character:

```
FIND {account\*}
RETURNING EntityDefinition
```

- RETURNING is required.

```
FIND {MyString}
RETURNING FieldDefinition
```

- Multiple object type names are supported.

```
...RETURNING EntityDefinition, FieldDefinition
```

- A field list is supported.

```
... RETURNING EntityDefinition (MasterLabel, QualifiedApiName)
```

- WHERE is supported, though logical operators are not.
- LIMIT is supported.

Example

```
FIND {account*}
RETURNING FieldDefinition (MasterLabel, NamespacePrefix
WHERE EntityDefinitionId='Account')
```

All other [SOSL operations](#) are unsupported. If you include an unsupported expression in a search term, the expression is ignored, except for the following, which cause an error:

- Multiple wildcards in a search term
- Unsupported operators OR or NOT
- Parentheses for grouping operators
- Morphological tokenization
- An asterisk wildcard isn't added at the end of single-character searches.

ExternalString

ExternalString doesn't support SOSL searches.

MetadataComponentDependency (Beta)

MetadataComponentDependency is a virtual entity, so it doesn't support SOSL searches.

Considerations for CRUD Operations in Active Orgs

CRUD operations on most Tooling API objects are allowed in active orgs in API version 41.0 and later, just as they are in other kinds of orgs. However, for performance reasons you can't perform CRUD operations in an active org for some Tooling API objects.

CRUD operations on the following Tooling API objects in an active org generate the error `Save or update not supported in active organizations.`

- ApexClass
- ApexComponent
- ApexPage
- ApexTrigger
- CustomField
- CustomObject

Allow Metadata Save Operations to Complete with Returned Warnings

When a metadata save operation generates warnings, the default behavior of Tooling API is to fail the operation without returning the warnings. For objects in both the Tooling API and Metadata API WSDLs, you can indicate that you want error-free save operations to complete successfully, returning any warnings.

To indicate that you want error-free save operations to complete successfully, returning any generated warnings, specify the header `ignoreSaveWarnings` in your HTTP request.

There is also a SOAP header in Tooling API for saving metadata even if warnings are returned. See [MetadataWarningsHeader](#) on page 834.

System Fields

Some fields are system-generated. They are on most Tooling API objects, and are read-only.

These fields are automatically updated during API operations. For example, the `Id` field is automatically generated when a record is created, and the `LastModifiedDate` is automatically updated during any operation on an object.

| Field | Field Type | Description |
|------------------------|------------|---|
| <code>Id</code> | ID | Globally unique string that identifies a record. <code>Id</code> fields have Defaulted on create and Filter access. |
| <code>IsDeleted</code> | boolean | Indicates whether the record has been moved to the Recycle Bin (<code>true</code>) or not (<code>false</code>). Because this field does not appear in all objects, it is listed in the field table for each object. |
| <code>CreatedBy</code> | User | The user who created the record. <code>CreatedBy</code> fields have Defaulted on create, Filter, Group, and Sort access. |

| Field | Field Type | Description |
|------------------|------------|---|
| CreatedById | reference | ID of the User who created this record. <code>CreatedById</code> fields have Defaulted on create, Filter, Group, and Sortaccess. |
| CreatedDate | dateTime | Date and time when this record was created. <code>CreatedDate</code> fields have Defaulted on create, Filter, and Sort access. |
| LastModifiedBy | User | The user who last modified this record. <code>LastModifiedBy</code> fields have Defaulted on create, Filter, Group, and Sort access. |
| LastModifiedById | reference | ID of the User who last updated this record. <code>LastModifiedById</code> fields have Defaulted on create, Filter, Group, and Sortaccess. |
| LastModifiedDate | dateTime | Date and time when a user last modified this record. <code>LastModifiedDate</code> fields have Defaulted on create, Filter, and Sort access. |
| SystemModstamp | dateTime | Date and time when this record was last modified by a user or by an automated process (such as a trigger). <code>SystemModstamp</code> fields have Defaulted on create and Filter access. |

To verify which fields are available for an object, check the Tooling API WSDL.

ApiFault Element

An `ApiFault` element contains information about a fault that occurs when processing a service request.

The `ApiFault` element has the following properties.

exceptionCode

Type

fns:ExceptionCode

Description

A code that characterizes the exception. The full list of exception codes is available in the Tooling API WSDL file for your org.

exceptionMessage

Type

string

Description

The message text associated with the exception code.

extendedErrorDetails

Type

tns:ExtendedErrorDetails

Description

Reserved for future use.

upgradeURL

Type

string

Description

A URL giving the location for more information about the upgrade.

upgradeMessage**Type**

string

Description

Message text describing why an upgrade is needed.

Tooling API Faults

The following API fault elements represent all the Tooling API faults that can occur. In API version 37.0 and later, these elements are in the Tooling API `fn`s namespace (`fault.tooling.soap.sforce.com`).

ApiQueryFault

The row and column numbers identifying where the problem occurred.

InvalidFieldFault

An invalid field in a `retrieve()` or `query()` call.

InvalidIdFault

A specified ID was invalid in a `setPassword()` or `resetPassword()` call.

InvalidNewPasswordFault

The new password specified doesn't conform to the org's password requirements. Password requirements can include length, character mix, reuse of old passwords, and so on.

InvalidOldPasswordFault

The password specified doesn't match the old password.

InvalidQueryLocatorFault

A problem in the `queryLocator` passed in a `queryMore()` call.

InvalidSObjectFault

An invalid `sObject` in a `describeSObject()`, `describeSObjects()`, `describeLayout()`, `describeDataCategoryGroups()`, `describeDataCategoryGroupStructures()`, `create()`, `update()`, `retrieve()`, or `query()` call.

LoginFault

An error occurred during the `login()` call.

MalformedQueryFault

A problem in the `queryString` passed in a `query()` call.

MalformedSearchFault

A problem in the `search` passed in a `search()` call.

UnexpectedErrorFault

An unexpected error occurred. The error is not associated with any other API fault.

Programming Objects

Use programming objects to interact with programmatic artifacts: Apex, Visualforce, and Lightning.

ApexClass

Represents the saved copy of an Apex class. ApexClass uses the cached version of the class unless one is unavailable.

ApexClassMember

Represents the working copy of an Apex class for editing, saving, or compiling in a MetadataContainer.

ApexComponent

Represents the saved copy of a Visualforce component. ApexComponent uses the cached version of the class unless one is unavailable.

ApexComponentMember

Represents the working copy of a Visualforce component for editing, saving, or compiling in a MetadataContainer.

ApexPage

Represents the saved copy of a Visualforce page. ApexPage uses the cached version of the page unless one is unavailable.

ApexExecutionOverlayAction

Specifies an Apex code snippet or SOQL query to execute at a specific line of code in an Apex class or trigger. Optionally, generates a heap dump.

ApexPageMember

Represents the working copy of a Visualforce page for editing, saving, or compiling in a MetadataContainer.

ApexTrigger

Represents the saved copy of an Apex trigger. ApexTrigger uses the cached version of the class unless one is unavailable.

ApexTriggerMember

Represents the working copy of an Apex trigger for editing, saving, or compiling in a MetadataContainer.

AuraDefinition

Represents an Aura component definition, such as component markup, a client-side controller, or an event.

AuraDefinitionBundle

Represents a Lightning Aura component definition bundle, such as a component or application bundle. A bundle contains a Lightning Aura component definition and all its related resources.

LightningComponentBundle

Represents a Lightning web component bundle. A bundle contains a Lightning web component and its related resources.

LightningComponentResource

Represents a Lightning web component resource, such as HTML markup, JavaScript code, a CSS file, an SVG resource, or an XML configuration file.

StaticResource

Represents the working copy of a static resource file for editing or saving. Static resources allow you to upload content that you can reference in a Visualforce page, including images, stylesheets, JavaScript, and other files.

Setup Objects

Use setup objects to interact with metadata for declarative development. For example, you can create your own version of Setup, or restrict the amount of data required to push to an app to a mobile phone.

BusinessProcess

Represents a business process.

CleanDataService

Represents a data service that adds and updates data in existing records in an org.

CleanRule

Represents a data integration rule that controls how a data service adds and updates data for existing records in an org.

CompactLayout

Represents the values that define a compact page layout.

CompactLayoutInfo

Represents the metadata for a custom or standard compact layout.

CompactLayoutItemInfo

Represents a field selected for a compact layout, and the order of that field in the compact layout.

CustomField

Represents a custom field on a custom object that stores data unique to your organization.

CustomFieldMember

Represents the working copy of a field for editing or saving in a MetadataContainer.

CustomObject

Represents a custom object that stores data unique to your organization. Includes access to the associated CustomObject object and related fields in Salesforce Metadata API.

CustomTab

Represents a custom tab.

DataAssessmentConfigItem

Represents a saved configuration for a specific vendor's package for data assessment.

DataIntegrationRecordPurchasePermission

Represents Lightning Data purchase credits that a Salesforce admin has granted to users.

DuplicateJobDefinition

Setup object defining a job that identifies duplicate record items globally.

DuplicateJobMatchingRuleDefinition

Setup object specifying a MatchingRule to use with DuplicateJob instances that share a DuplicateJobDefinition.

Document

Represents a file that a user has uploaded. Unlike Attachment records, documents are not attached to a parent object.

EmailTemplate

Represents a template for an email, mass email, list email, or HVS email.

EntityDefinition

Provides row-based access to metadata about standard and custom objects.

EntityLimit

Represents the limits for an object as displayed in the Setup UI.

FieldDefinition

Represents a standard or custom field, providing row-based access to field metadata. Contrast FieldDefinition with EntityParticle, which represents each element of a field that can be presented in a user interface. FieldDefinition has parity with metadata type Field.

FieldMapping

Represents a mapping between fields in an object in the org and fields in a data service. A data service uses two separate field maps: one controls how the data service matches records in an object, and the other controls how the data service adds or updates data for an existing record.

FieldMappingField

Represents a field in an object in the org that maps to a field in a data service.

FieldMappingRow

Represents a field in a data service record that maps to a field in an object record in the org.

FieldSet

Represents the metadata for a group of fields.

FlexiPage

Represents a Lightning page. A Lightning page is a customizable page composed of regions containing Lightning components.

Flow

Use the Flow object to retrieve and update specific flow versions.

FlowDefinition

The parent of a set of flow versions.

Group

Represents a set of User records. Groups can contain individual users, other groups, or the users in a particular role or territory. In addition, groups can contain all users below a particular role or territory in the hierarchy.

HistoryRetentionJob

Represents the body of retained data from the archive, and the status of the archived data.

KeywordList

Represents a list of keywords used in Experience Cloud site moderation.

Layout

Represents a page layout.

LookupFilter

Represents a lookup filter, which restricts the valid values and lookup dialog results for lookup, master-detail, and hierarchical relationship fields.

MatchingRule

Setup object specifying a MatchingRule to use with DuplicateJob instances that share a DuplicateJobDefinition. Available in Tooling API version 42.0 and later.

MenuItem

Represents a menu item.

ModerationRule

Represents a rule used in your Experience Cloud site to moderate member-generated content.

Profile

Represents a user profile. A profile defines a user's permission to perform different functions within Salesforce.

ProfileLayout

Represents a profile layout.

QuickActionDefinition

Represents the definition of a quick action.

QuickActionList

Represents a list of quick actions.

QuickActionListItem

Represents an item in a quick action list.

RecentlyViewed

Represents metadata entities typically found in Setup such as page layout definitions, workflow rule definitions, and email templates that the current user has recently viewed.

RecordType

Represents a custom record type.

SearchLayout

Represents a search layout defined for an object.

Scontrol

Represents a custom s-control, which is custom content that our system hosts, but client applications execute. An s-control can contain any type of content that you can display or run in a Web browser.

User

Represents a user. You can retrieve standard fields on User with the Tooling API, but custom fields can't be retrieved.

WebLink

Represents a custom button or link.

ValidationRule

Represents a validation rule or workflow rule which specifies the formula for when a condition is met.

WorkflowAlert

Represents a workflow alert. A workflow alert is an email generated by a workflow rule or approval process and sent to designated recipients.

WorkflowFieldUpdate

Represents a workflow field update.

WorkflowOutboundMessage

Represents an outbound message. An outbound message sends information to a designated endpoint, like an external service. Outbound messages are configured from Setup. You must configure the external endpoint and create a listener for the messages using the SOAP API.

WorkflowRule

Represents a workflow rule that is used to fire off a specific workflow action when the specified criteria is met. Includes access to the associated WorkflowRule object in Salesforce Metadata API.

WorkflowTask

Represents a workflow task that is used to fire off a specific workflow action when the specified criteria is met. Includes access to the associated WorkflowRule object in Salesforce Metadata API.

Tooling Objects

Use these objects to build tools around test results, debugging, code coverage, and more.

ApexCodeCoverage

Represents code coverage test results for an Apex class or trigger.

ApexCodeCoverageAggregate

Represents aggregate code coverage test results for an Apex class or trigger. Available in Tooling API version 29.0 and later.

ApexExecutionOverlayAction

Specifies an Apex code snippet or SOQL query to execute at a specific line of code in an Apex class or trigger. Optionally, generates a heap dump.

ApexExecutionOverlayResult

Represents the result from the Apex code snippet or SOQL query defined in the associated ApexExecutionOverlayAction, and the resulting heap dump if one was returned.

ApexLog

Represents a debug log.

ApexOrgWideCoverage

Represents code coverage test results for an entire organization.

ApexResult

A complex type that represents the result of Apex code executed as part of an `ApexExecutionOverlayAction`, returned in an `ApexExecutionOverlayResult`.

ApexTestQueueItem

Represents a single Apex class in the Apex job queue.

HeapDump

A complex type that represents a heap dump in an `ApexExecutionOverlayResult` object.

SOQLResult

A complex type that represents the result of a SOQL query in an `ApexExecutionOverlayResult` object.

SymbolTable

A complex type that represents all user-defined tokens in the `Body` of an `ApexClass`, `ApexClassMember`, or `ApexTriggerMember` and their associated line and column locations within the `Body`.

TraceFlag

Represents a trace flag that triggers an Apex debug log at the specified logging level.

Operational Objects

Use the following objects for Tooling API operations.

ContainerAsyncRequest

Allows you to compile and asynchronously deploy a `MetadataContainer` object to your organization.

DeployDetails

A complex type that contains detailed XML for any compile errors reported in the asynchronous request defined by a `ContainerAsyncRequest` object.

MetadataContainer

Manages working copies of `ApexClassMember`, `ApexTriggerMember`, `ApexPageMember`, and `ApexComponentMember` objects, including collections of objects to be deployed together.

OperationLog

Represents long-running or asynchronous operations triggered and tracked through Tooling API.

SourceMember

Represents a single `sObject` of all source that you are tracking in an org.

The following Tooling API objects are used internally by the Developer Console.

- `IDEPerspective`
- `IDEWorkspace`
- `User.WorkspaceId`

CHAPTER 4 Tooling API Objects

Tooling API includes the following objects:

IN THIS SECTION:

[ActivationPlatform](#)

Represents metadata about ActivationPlatform, such as platform name, delivery schedule, output format, and destination folder. This object is available in API version 54.0 and later.

[AdvAcctFrstDisplayGroup](#)

Represents information about the groups for the advanced account forecast set measures or dimensions. This object is available in API version 57.0 and later.

[AdvAccountForecastSet](#)

Represents an advanced account forecast set. This object is available in API version 56.0 and later.

[AdvAcctForecastMeasureDef](#)

Represents information about the measures to be displayed in the advanced account forecasts grid for the forecast set. This object is available in API version 57.0 and later.

[AIApplication](#)

Represents an instance of a machine learning (ML) application. Available in API version 50.0 and later.

[AIApplicationConfig](#)

Represents additional prediction information related to a machine learning (ML) application. Available in API version 50.0 and later.

[AnimationRule](#)

Represents criteria for determining when an animation is displayed to Path users. Available in API version 46.0 and later.

[ApexClass](#)

Represents the saved copy of an Apex class. ApexClass uses the cached version of the class unless one is unavailable. Available from API version 28.0 or later.

[ApexClassMember](#)

Represents the working copy of an Apex class for editing, saving, or compiling in a MetadataContainer.

[ApexCodeCoverage](#)

Represents code coverage test results for an Apex class or trigger. Available in Tooling API version 29.0 and later.

[ApexCodeCoverageAggregate](#)

Represents aggregate code coverage test results for an Apex class or trigger. Available in Tooling API version 29.0 and later.

[ApexComponent](#)

Represents the saved copy of a Visualforce component. ApexComponent uses the cached version of the class unless one is unavailable. Available from API version 28.0 or later.

[ApexComponentMember](#)

Represents the working copy of a Visualforce component for editing, saving, or compiling in a MetadataContainer.

[ApexEmailNotification](#)

Stores a Salesforce user ID or external email address to be notified when unhandled Apex exceptions occur. This object is available in API version 35.0 and later.

Tooling API Objects

[ApexExecutionOverlayAction](#)

Specifies an Apex code snippet or SOQL query to execute at a specific line of code in an Apex class or trigger. Optionally, generates a heap dump.

[ApexExecutionOverlayResult](#)

Represents the result from the Apex code snippet or SOQL query defined in the associated `ApexExecutionOverlayAction`, and the resulting heap dump if one was returned. Available from API version 28.0 or later.

[ApexLog](#)

Represents a debug log.

[ApexOrgWideCoverage](#)

Represents code coverage test results for an entire organization. Available in Tooling API version 29.0 and later.

[ApexPage](#)

Represents the saved copy of a Visualforce page. `ApexPage` uses the cached version of the page unless one is unavailable. Available from API version 28.0 or later.

[ApexPageInfo](#)

Represents metadata about a Visualforce page. This object is available in API version 37.0 and later.

[ApexPageMember](#)

Represents the working copy of a Visualforce page for editing, saving, or compiling in a `MetadataContainer`.

[ApexResult](#)

A complex type that represents the result of Apex code executed as part of an `ApexExecutionOverlayAction`, returned in an `ApexExecutionOverlayResult`. Available from API version 28.0 or later.

[ApexTestQueueItem](#)

Represents a single Apex class in the Apex job queue. Available in API version 30.0 and later.

[ApexTestResult](#)

Represents the result of an Apex test method execution. Available from API version 30.0 or later.

[ApexTestResultLimits](#)

Captures the Apex test limits used for a particular test method execution. An instance of this object is associated with each `ApexTestResult` object. Available from API version 37.0 or later.

[ApexTestRunResult](#)

Contains summary information about all the test methods that were run in a particular Apex job. Available from API version 37.0 or later.

[ApexTestSuite](#)

Represents a suite of Apex classes to include in a test run. A `TestSuiteMembership` object associates each class with the suite. Available in the `ens` namespace in Tooling API version 36.0 and later. Also, available in the `mn.s` namespace in Tooling API version 38.0 and later.

[ApexTrigger](#)

Represents the saved copy of an Apex trigger. `ApexTrigger` uses the cached version of the class unless one is unavailable. Available from API version 28.0 or later.

[ApexTriggerMember](#)

Represents the working copy of an Apex trigger for editing, saving, or compiling in a `MetadataContainer`.

[AssignmentRule](#)

Don't use this object.

Tooling API Objects

[AuraDefinition](#)

Represents an Aura component definition, such as component markup, a client-side controller, or an event. Available in API version 32.0 and later.

[AuraDefinitionBundle](#)

Represents a Lightning Aura component definition bundle, such as a component or application bundle. A bundle contains a Lightning Aura component definition and all its related resources. Available in API version 32.0 and later.

[AutoResponseRule](#)

Specifies whether the autoresponse rule is active (`true`).

[BrandingSet](#)

Represents a set of branding properties for an Experience Builder site, as defined in the Theme panel in Experience Builder. This object is available in API version 40.0 and later.

[BrandingSetProperty](#)

Represents a branding set property in the Theme panel in Experience Builder. This object is available in API version 40.0 and later.

[BriefcaseDefinition](#)

Represents a briefcase definition. A briefcase makes selected records available for users and groups to view when they're offline in the Salesforce Field Service mobile app for iOS and Android. This object is available in API version 50.0 and later.

[BusinessProcess](#)

Represents a business process.

[BusinessProcessDefinition](#)

Represents information about stages in a customer lifecycle map. This object is available in API version 51.0 and later.

[BusinessProcessFeedback](#)

Represents information about the survey and the question associated with each stage in a customer lifecycle map. This object is available in API version 51.0 and later.

[BusinessProcessGroup](#)

Represents information about the customer lifecycle maps. Customer lifecycle maps are used to track the scores provided by customers across their lifecycle using Salesforce Surveys. For example, the lifecycle stages for an Insurance business process group can include acquisition, onboarding, claims, routine services, and renewal. This object is available in API version 51.0 and later.

[BusProcessFeedbackConfig](#)

Represents information about the configuration for feedback collection. The feedback collection method triggers against pre-determined conditions on object to gather feedback. This object is available in API version 51.0 and later.

[Certificate](#)

Represents a certificate used for digital signatures that verify requests are coming from your org. Certificates are used for either authenticated single sign-on with an external website or when using your org as an identity provider. This object is available in Tooling API version 37.0 and later.

[CleanDataService](#)

Represents a data service that adds and updates data in existing records in an org.

[CleanRule](#)

Represents a data integration rule that controls how a data service adds and updates data for existing records in an org.

[ColorDefinition](#)

Represents color metadata for a tab. Available in API version 43.0 and later.

[CommunityWorkspacesNode](#)

Represents a node used in Experience Workspaces. Available in Tooling API version 39.0 and later.

[CompactLayout](#)

Represents the values that define a compact page layout.

[CompactLayoutInfo](#)

Represents the metadata for a custom or standard compact layout.

[CompactLayoutItemInfo](#)

Represents a field selected for a compact layout, and the order of that field in the compact layout.

[ConnectedApplication](#)

For internal use only.

[ContainerAsyncRequest](#)

Allows you to compile and asynchronously deploy a MetadataContainer object to your organization.

[CspTrustedSite](#)

Represents a trusted URL. For each CspTrustedSite, you can specify Content Security Policy (CSP) directives and permissions policy directives. Each CSP directive allows Lightning components, third-party APIs, and WebSocket connections to access a resource type from the trusted URL. If the Permissions-Policy HTTP header is enabled, each permissions policy directive grants the trusted URL access to a browser feature. In API version 58.0 and earlier, CspTrustedSite included only CSP directives and was referred to as CSP Trusted Sites in Salesforce Setup. Available in API version 39.0 and later.

[CustomApplication](#)

Represents a custom or standard application. An application is a list of tab references, a description, and a logo. It also includes access to the associated CustomApplication type and related fields in Metadata API. Available in Tooling API version 42.0 or later.

[CustomField](#)

Represents a custom field on a custom object that stores data unique to your organization. Includes access to the associated CustomField object and related fields in Salesforce Metadata API. Available from API version 28.0 or later.

[CustomFieldMember](#)

Represents the working copy of a field for editing or saving in a MetadataContainer. This object is available in API version 33.0 and later.

[CustomHelpMenuSection](#)

Represents a section of the Lightning Experience help menu that the admin added to display custom, org-specific help resources. Available in API version 45.0 and later.

[CustomHTTPHeader](#)

Represents a custom HTTP header used with OData 2.0 or OData 4.0 external data sources. Custom HTTP headers provide context information from Salesforce such as region, org details, or the role of the person viewing the external object. This object is available in API version 51.0 and later.

[CustomNotificationType](#)

Stores information about custom notification types. This object is available in API version 46.0 and later.

[CustomObject](#)

Represents a custom object that stores data unique to your organization. Includes access to the associated CustomObject object and related fields in Salesforce Metadata API. Available from API version 31.0 or later.

[CustomTab](#)

Represents a custom tab.

[DataAssessmentConfigItem](#)

Represents a saved configuration for a specific vendor's package for data assessment. This object is available in API version 40.0 and later.

Tooling API Objects

[DataIntegrationRecordPurchasePermission](#)

Represents Lightning Data purchase credits that a Salesforce admin has granted to users. Available in Tooling API version 42.0 and later.

[DataType](#)

Represents the datatype of a field. Use this object with `EntityDefinition`, `EntityParticle`, or `FieldDefinition` to simplify queries. Available in Tooling API version 34.0 and later.

[DebugLevel](#)

Represents a set of log category levels to assign to a `TraceFlag` object. Multiple trace flags can use a debug level.

[DelegateGroup](#)

Represents a Delegate Group for queries. This object is available in Tooling API version 57.0 and later.

[DelegateGroupGrant](#)

Represents a Delegate Group Grant, indicating permissions granted to a delegate group. This object is available in Tooling API version 57.0 and later.

[DelegateGroupMember](#)

Represents users assigned to the delegate group. This object is available in Tooling API version 57.0 and later.

[DeployDetails](#)

A complex type that contains detailed XML for any compile errors reported in the asynchronous request defined by a `ContainerAsyncRequest` object. Replaces the JSON field `CompilerErrors` in Tooling API version 31.0 and later.

[Document](#)

Represents a file that a user has uploaded. Unlike Attachment records, documents are not attached to a parent object. Available in Tooling API version 38.0 and later.

[DuplicateJobDefinition](#)

Setup object defining a job that identifies duplicate record items globally. Available in Tooling API version 42.0 and later.

[DuplicateJobMatchingRuleDefinition](#)

Setup object specifying a `MatchingRule` to use with `DuplicateJob` instances that share a `DuplicateJobDefinition`. Available in Tooling API version 42.0 and later.

[EmailTemplate](#)

Represents a template for an email, mass email, list email, or Sales Engagement email. Supported in first-generation managed packages only.

[EmbeddedServiceBranding](#)

Represents branding for each Embedded Service deployment. Available in Tooling API version 39.0 and later.

[EmbeddedServiceConfig](#)

Represents a setup node for creating an Embedded Service deployment. Available in API version 38.0 and later.

[EmbeddedServiceCustomComponent](#)

Represents a custom component created for an Embedded Service feature. The custom components can be an Aura or Lightning Web Component. This object is available in API version 44.0 and later.

[EmbeddedServiceCustomization](#)

Represents a mapping between the `EmbeddedServiceCustomization` record parent and the `EmbeddedServiceConfiguration` or `EmbeddedServiceMenuSettings`, for a set of Embedded Service resources. Each resource is set of customizations applied via an uploaded static resource for your Embedded Chat. This object is available in API version 52.0 and later.

Tooling API Objects

[EmbeddedServiceCustomLabel](#)

Represents a customized label that appears in the embedded component for a particular Embedded Service deployment. Labels can be customized for both Embedded Chat and embedded Appointment Management (beta). Available in API version 44.0 and later.

[EmbeddedServiceFieldService](#)

Represents a setup node for creating an embedded Appointment Management (beta) deployment. Available in Tooling API version 43.0 and later.

[EmbeddedServiceFlow](#)

Represents a Flow Definition used by an Embedded Service deployment. This object is available in API version 45.0 and later.

[EmbeddedServiceFlowConfig](#)

Represents whether an Embedded Service Flow feature is enabled or not. This object is available in API version 45.0 and later.

[EmbeddedServiceLiveAgent](#)

Represents a setup node for creating an Embedded Chat deployment. Available in Tooling API version 38.0 and later.

[EmbeddedServiceMenuItem](#)

Represents the information needed to configure a Channel Menu item. This object is available in API version 47.0 and later.

[EmbeddedServiceMenuSettings](#)

Represents a setup node for creating a channel menu deployment. Channel menus list the ways in which customers can contact your business. This object is available in API version 47.0 and later.

[EmbeddedServiceQuickAction](#)

Returns a quick action that is associated with an EmbeddedServiceLiveAgent setup. The quick action includes the pre-chat form fields that the embedded chat window displays and shows the order in which the fields are displayed. Available in Tooling API version 39.0 and later.

[EmbeddedServiceResource](#)

Represents a mapping from an EmbeddedServiceCustomization record parent to a set of resources. Each resource is a set of customizations applied via an uploaded static resource for your Embedded Chat. This object is available in API version 50.0 and later.

[EnrichedField](#)

Represents a field selected for Change Data Capture Enrichment for a channel and channel member. A non-empty enriched field is added to an update or delete change event even when not changed. Available in API version 51.0 and later.

[EntityDefinition](#)

Provides row-based access to metadata about standard and custom objects.

[EntityLimit](#)

Represents the limits for an object as displayed in the Setup UI.

[EntityParticle](#)

Represents each element of a field that can be presented in a user interface. Contrast EntityParticle with FieldDefinition, which represents each element of a field defined in the Metadata API. EntityParticle has parity with `describe`, which returns API accessible fields only for an entity. Available in Tooling API version 34.0 and later.

[EventDelivery](#)

Represents how an event instant maps to a target payload. Removed in API version 46.0. Available in API version 41.0 to 45.0.

[EventRelayConfig](#)

Represents the configuration of an event relay, which relays platform events and change data capture events from Salesforce to Amazon EventBridge. This object is available in API version 56.0 and later.

[EventSubscription](#)

Represents a subscription to an event type. Removed in API version 46.0. Available in API version 41.0 to 45.0.

[ExternalClientAppSettings](#)

For internal use only.

[ExternalCredential](#)

Represents the details of how Salesforce authenticates to the external system. This object is available in API version 56.0 and later.

[ExternalDataSource](#)

Represents the metadata associated with an external data source. Create external data sources to manage connection details for integration with data and content that are stored outside your Salesforce org. This object is available in API version 51.0 and later.

[ExternalDataSrcDescriptor](#)

Contains the metadata information for the external schema of an external data source. Use the metadata to map attributes from an AWS data source, such as Amazon DynamoDB and Amazon Athena, to Salesforce external object fields. Also, use the metadata to customize the data retrieval queries to an AWS data source. This object is available in API version 55.0 and later for Amazon DynamoDB and in API version 56.0 and later for Amazon Athena.

[ExternalServiceRegistration](#)

Represents the External Service configuration for an org. Available in API version 39.0 and later.

[ExternalString](#)

Represents a custom label for a translatable UI component. Includes access to the associated label in the Metadata API. Available in API version 38.0 and later.

[ExternalStringLocalization](#)

Represents the translation of custom labels for a UI component represented by the [ExternalString](#) object. This object is available in API version 49.0 and later.

[FieldDefinition](#)

Represents a standard or custom field, providing row-based access to field metadata. Contrast FieldDefinition with EntityParticle, which represents each element of a field that can be presented in a user interface. FieldDefinition has parity with metadata type Field.

[FieldMapping](#)

Represents a mapping between fields in an object in the org and fields in a data service. A data service uses two separate field maps: one controls how the data service matches records in an object, and the other controls how the data service adds or updates data for an existing record.

[FieldMappingField](#)

Represents a field in an object in the org that maps to a field in a data service.

[FieldMappingRow](#)

Represents a field in a data service record that maps to a field in an object record in the org.

[FieldRestrictionRule](#)

Represents a field visibility rule that controls whether a field is visible to a user, based on the field's inclusion in the PersonalInfo_EPIM field set. If Enhanced Personal Information Management setting was enabled before Spring '22, field visibility is based on the field's compliance categorization. This object is available in API version 52.0 and later.

[FieldSet](#)

Represents the metadata for a group of fields. Available from API version 33.0 or later.

[FlexiPage](#)

Represents a Lightning page. A Lightning page is a customizable page composed of regions containing Lightning components.

Tooling API Objects

[Flow](#)

Use the Flow object to retrieve and update specific flow versions.

[FlowDefinition](#)

The parent of a set of flow versions.

[FlowElementTestCoverage](#)

Represents a flow element that was executed by a given Apex test method. Available in API version 44.0 and later.

[FlowTest \(Beta\)](#)

Represents the description of a flow test associated with a flow definition. This object is available in API version 55.0 and later.

[FlowTestCoverage](#)

Represents test coverage for a flow or process by a given Apex method. Available in API version 44.0 and later.

[ForecastingDisplayedFamily](#)

Represents the product families that an admin chooses to allow forecasting on in Lightning Experience. Available in Tooling API version 40.0 and later.

[ForecastingFilter](#)

Represents the custom filter for including or excluding data from opportunity forecasts. This object is available in API version 55.0 and later.

[ForecastingFilterCondition](#)

Represents the custom filter condition logic for including or excluding data from opportunity forecasts. This object is available in API version 55.0 and later.

[ForecastingSourceDefinition](#)

Represents the object, measure, date type, and hierarchy that a forecast uses to project sales. This object is available in API version 52.0 and later.

[ForecastingType](#)

Represents a forecast type. This object is available in API version 52.0 and later.

[ForecastingTypeSource](#)

Represents the mapping of a forecasting source definition to a forecast type. This object is available in API version 52.0 and later.

[FormulaFunction](#)

Represents a function used when building a formula, including examples and uses. This object is available in Tooling API version 39.0 and later.

[FormulaFunctionAllowedType](#)

Represents the functions that are supported in the given formula context. Available in API version 48.0 and later.

[FormulaOperator](#)

Represents an operator used when building a formula, including examples and uses. This object is available in Tooling API version 39.0 and later.

[GlobalValueSet](#)

Represents a set of values used by a global picklist. Available from API version 39.0 or later.

[Group](#)

Represents a set of User records. Groups can contain individual users, other groups, or the users in a particular role or territory. In addition, groups can contain all users below a particular role or territory in the hierarchy. Available in Tooling API version 38.0 and later.

[GtwyProvPaymentMethodType](#)

Represents a type that allows integrators and payment providers to choose an active payment to receive an order's payment data rather than allowing the Salesforce Order Management platform to select a default payment method. This object is available in API version 50.0 and later.

[HeapDump](#)

A complex type that represents a heap dump in an ApexExecutionOverlayResult object. Available from API version 28.0 or later.

[HistoryRetentionJob](#)

Represents the body of retained data from the archive, and the status of the archived data. Available in API version 29.0 or later.

[HomePageComponent](#)

Represents a home page component.

[HomePageLayout](#)

Represents a home page layout.

[IconDefinition](#)

Represents an icon, such as used for a tab. Available in API version 43.0 and later.

[InboundNetworkConnection](#)

Represents the a private connection between a third-party data service and a Salesforce org. The connection is inbound because the callouts are coming *into* Salesforce.. Available in API version 49.0 and later.

[InboundNetworkConnProperty](#)

Represents a name-value pair that describes the properties of the inbound network connection. Available in API version 49.0 and later.

[Index](#)

Represents the index defined within a custom big object. Available in Tooling API version 41.0 and later.

[IndexField](#)

Represents the fields in the index of a custom big object. Available in Tooling API version 41.0 and later.

[InstalledSubscriberPackage](#)

Represents a package (first- or second-generation) that is installed in a subscriber's org. Available in API version 41.0 and later.

[InstalledSubscriberPackageVersion](#)

Deprecated and slated for removal. Represents a package version (first- or second-generation) that is installed in a subscriber's org. Available in API version 41.0 and later.

[IPAddressRange](#)

Represents a range of IP addresses to include in or exclude from the specified feature.

[KeywordList](#)

Represents a list of keywords used in Experience Cloud site moderation. Available in Tooling API version 36.0 and later.

[Layout](#)

Represents a page layout.

[LightningComponentBundle](#)

Represents a Lightning web component bundle. A bundle contains a Lightning web component and its related resources. Available in API version 45.0 and later.

[LightningComponentResource](#)

Represents a Lightning web component resource, such as HTML markup, JavaScript code, a CSS file, an SVG resource, or an XML configuration file. Available in API version 45.0 and later.

Tooling API Objects

[LookupFilter](#)

Represents a lookup filter, which restricts the valid values and lookup dialog results for lookup, master-detail, and hierarchical relationship fields.

[ManagedContentNodeType](#)

Represents standard and custom content node types created for use with your org. Available in API version 47.0 and later.

[ManagedContentType](#)

Represents standard and custom content types created for use with your org. Available in API version 47.0 and later.

[MarketingAppExtension](#)

Represents an integration with a third-party app or service that generates prospect external activity. Available in API version 53.0 and later.

[MarketingAppExtAssignment](#)

Represents a Marketing App Extension Business Unit assignment, which dictates which Account Engagement business unit the external activity data is available in. Available in API version 53.0 and later.

[MarketingAppExtActivity](#)

Represents an Activity Type, which is a prospect activity that occurs in a third-party app and can be used in Account Engagement automations. . Available in API version 53.0 and later.

[MarketingAppExtAction](#)

Represents an Action Type, which is an action that you can add to Engagement Studio programs in Account Engagement and execute in a third-party app. This object is available in API version 56.0 and later.

[MatchingRule](#)

Setup object specifying a MatchingRule to use with DuplicateJob instances that share a DuplicateJobDefinition. Available in Tooling API version 42.0 and later.

[MenuItem](#)

Represents a menu item.

[MetadataComponentDependency \(Beta\)](#)

Represents dependency relationships between the metadata components in your org. You can query MetadataComponentDependency using Tooling API in API version 43.0 and later or using Bulk API 2.0 in API 49.0 and later.

[MetadataContainer](#)

Manages working copies of ApexClassMember, ApexTriggerMember, ApexPageMember, and ApexComponentMember objects, including collections of objects to be deployed together.

[MetadataPackage](#)

Represents a package that has been developed in the org you're logged in to. Applies to unlocked, unmanaged, first-generation, and second-generation managed packages. Available in Tooling API version 38.0 and later.

[MetadataPackageVersion](#)

Represents a package version (managed or unmanaged) that has been uploaded from the org you're logged in to. Available in Tooling API version 38.0 and later.

[MLDataDefinition](#)

Represents a modeling data definition, which specifies the data used to create a model for a machine learning (ML) application. Examples of such data can include filters, fields to include, and fields to exclude. Available from API version 50.0 or later.

[MLField](#)

Represents a field in a modeling data definition. A modeling data definition specifies the data used to create a model for a machine learning (ML) application. Available from API version 50.0 or later.

Tooling API Objects

[MLFilter](#)

Represents a data filter based on a data comparison in a machine learning (ML) application. For each comparison, there's a left-hand element, an operator, and a right-hand element. Available in API version 50.0 and later.

[MLPredictionDefinition](#)

Represents the details about a prediction within a prediction definition used in a machine learning (ML) application. Available in API version 50.0 and later.

[ModerationRule](#)

Represents a rule used in your Experience Cloud site to moderate member-generated content. Available in Tooling API version 36.0 and later.

[NamedCredential](#)

Represents a named credential, which specifies the URL of a callout endpoint and its required authentication parameters in one definition. A named credential can be specified as an endpoint to simplify the setup of authenticated callouts. This object is available in API version 51.0 and later.

[ObjectHierarchyRelationship](#)

Represents the mapping between an input source object and an output target object. For example, mapping details to transform a sales quote into a sales agreement. This object is available in API version 56.0 and later.

[OmniSupervisorConfig](#)

Represents the Omni-Channel supervisor configuration for an assigned group of supervisors. This object is available in API version 57.0 and later.

[OperationLog](#)

Represents long-running or asynchronous operations triggered and tracked through Tooling API. This object is available in API version 37.0 and later.

[OpportunitySplitType](#)

Represents labels and behavior for each split type Available in Tooling API version 37.0 and later.

[OrgDomainLog](#)

Represents a Salesforce org's previous My Domain. This object is available in API version 51.0 and later.

[OutboundNetworkConnection](#)

Represents a private connection between a Salesforce org and a third-party data service. The connection is outbound because the callouts are going *out* of Salesforce. Available in API version 49.0 and later.

[OutboundNetworkConnProperty](#)

Represents a name-value pair that describes the properties of the outbound network connection. Available in API version 49.0 and later.

[OwnerChangeOptionInfo](#)

Represents default and optional actions that can be performed when a record's owner is changed. Available in Tooling API version 35.0 and later.

[PackageInstallRequest](#)

Represents a request to install a package (first- or second-generation) in a target subscriber org. Available in API version 41.0 and later.

[PackageUploadRequest](#)

Represents a request to upload a first-generation package version and its components so that subscribers can install it. Available in API version 38.0 and later.

[PackageVersionUninstallRequestError](#)

Represents an error encountered while requesting an uninstall of a `Package2Version` (second-generation package version). Available in API version 41.0 and later.

[PathAssistant](#)

Represents a Path. Available in Tooling API version 36.0 and later.

[Package2](#)

Represents a second-generation managed package or an unlocked package in a Dev Hub org. Values for all fields are visible to the subscriber. Available in API version 41.0 and later.

[Package2Member](#)

Represents a component in a second-generation managed package in a subscriber's org. Created when the subscriber installs the package. Available in API version 41.0 and later.

[Package2Version](#)

Represents a second-generation package version in a Dev Hub org. Values for all fields except for `Tag` and `Branch` are visible to the subscriber. Available in API version 41.0 and later.

[Package2VersionCreateRequest](#)

Represents a request to create a second-generation managed package or an unlocked package version in a Dev Hub org. Available in API version 41.0 and later.

[Package2VersionCreateRequestError](#)

Represents an error encountered while creating a second-generation managed package or an unlocked package version. Available in API version 41.0 and later.

[PardotTenant](#)

Represents an Account Engagement business unit. This object is available in API version 56.0 and later.

[PathAssistantStepInfo](#)

Represents guidance for a step on a Path. Available in Tooling API version 36.0 and later.

[PathAssistantStepItem](#)

Represents layout or guidance details for a step on a Path. Available in Tooling API version 36.0 and later.

[PaymentGatewayProvider](#)

Represents the payment gateway provider processing payments. This object is available in API version 48.0 and later.

[PermissionDependency](#)

Represents permission dependencies for a specified permission. For example, return all child dependencies for the `Modify All Data` permission. Available in Tooling API version 46.0 and later.

[PermissionSet](#)

Represents a set of permissions that's used to grant more access to users without changing their profile or reassigning profiles. Available in API version 28.0 and later.

[PermissionSetGroup](#)

Represents a group of permission sets and the permissions within them. Use permission set groups to organize permissions based on job functions or tasks. Then, you can package the groups as needed. Available in Tooling API version 45.0 and later.

[PermissionSetGroupComponent](#)

A junction object that relates the `PermissionSetGroup` and `PermissionSet` objects via their respective IDs; enables permission set group recalculation to determine the aggregated permissions for the group. Available in Tooling API version 45.0 and later.

[PermissionSetTabSetting](#)

Represents a tab's settings for a profile or permission set. Use `PermissionSetTabSetting` for manipulating tab visibility on profiles and permission sets. Available in Tooling API version 37.0 and later.

[PipelineInspMetricConfig](#)

Represents the configuration of a forecast category metric that appears in the Pipeline Inspection view. This object is available in API version 55.0 and later.

[PlatformEventChannel](#)

Represents a custom channel that you can subscribe to in order to receive a stream of change data capture events. In API version 54.0 and later, `PlatformEventChannel` can contain a stream of platform events with Platform Event Stream Filtering Beta.

[PlatformEventChannelMember](#)

Represents an entity selected for Change Data Capture notifications on a standard or custom channel, or a platform event selected on a custom channel.

[PlatformEventSubscriberConfig](#)

Represents configuration settings for a platform event Apex trigger, including the batch size and the trigger's running user. This object is available in API version 51.0 and later.

[PostTemplate](#)

Represents an approval post template for Approvals in Chatter.

[ProcessFlowMigration](#)

Represents a process's migrated criteria and the resulting migrated flow. This object is available in API version 58.0 and later.

[Profile](#)

Represents a user profile. A profile defines a user's permission to perform different functions within Salesforce. This type extends the `Metadata` metadata type and inherits its `fullName` field.

[ProfileLayout](#)

Represents a profile layout.

[Publisher](#)

Represents the publisher of objects and fields. For example, Salesforce is the publisher for standard objects, the organization is the publisher for custom objects, and the package is the publisher for installed packages. Available in Tooling API version 34.0 and later.

[QueryResult](#)

Represents the results of a query. For example, if you query on the object `EntityDefinition`, all the layouts for that entity are returned as an array of `QueryResult` objects in the `Layouts` field. Available in Tooling API version 34.0 and later.

[QuickActionDefinition](#)

Represents the definition of a quick action.

[QuickActionList](#)

Represents a list of quick actions.

[QuickActionListItem](#)

Represents an item in a quick action list.

[RecentlyViewed](#)

Represents metadata entities typically found in Setup such as page layout definitions, workflow rule definitions, and email templates that the current user has recently viewed.

[RecommendationStrategy](#)

Represents a recommendation strategy. Recommendation strategies are applications, similar to data flows, that determine a set of recommendations to be delivered to the client through data retrieval, branching, filtering, and logic operations. Available in API 45.0 and later.

[RecordActionDeployment](#)

Represents configuration settings for the Actions & Recommendations and Action Launcher components. RecordActionDeployment is available in API version 45.0 and later.

[RecordType](#)

Represents a custom record type.

[RelatedListColumnDefinition](#)

Represents information about a column in a related list. A related list specifies a set of records for a related object, based on specific criteria. This object is available in API version 55.0 and later.

[RelatedListDefinition](#)

Represents information about a related list. A related list specifies a set of records for a related object, based on specific criteria. This object is available in API version 55.0 and later.

[RelationshipDomain](#)

Represents the relationship an object has with other objects. RelationshipDomain allows you to write simpler queries. For example, “which objects are the child objects for the object defined in `ParentObject`” is easier using RelationshipDomain. Available in Tooling API version 34.0 and later.

[RelationshipInfo](#)

Represents the properties of a relationship between objects. Simplify queries with RelationshipInfo, such as answering the question “which objects are parent objects for the object defined in `ChildObject`”. Available in Tooling API version 34.0 and later.

[ReleaseUpdate](#)

Represents an individual release update. Available in API version 50.0 and later.

[RemoteProxy](#)

Represents a set of remote site settings that allows you to access an external site from Salesforce. Use RemoteProxy when accessing external sites called by Visualforce pages, Apex callouts, or JavaScript codes using XMLHttpRequest in an s-control or custom button. To be accessible, an external site must have its settings defined with RemoteProxy or registered in the Remote Site Settings page. Available in Tooling API version 37.0 and later.

[RestrictionRule](#)

Represents a restriction rule or a scoping rule. A restriction rule has `EnforcementType` set to `Restrict` and controls the access that specified users have to designated records. A scoping rule has `EnforcementType` set to `Scoping` and controls the default records that your users see without restricting access.

[SandboxInfo](#)

Represents a sandbox.

[SandboxProcess](#)

Represents the sandbox copy process for a SandboxInfo record.

[SchedulingObjective](#)

Represents scheduling objective settings for Workforce Engagement. This object is available in API version 55.0 and later.

[SchedulingRule](#)

Represents scheduling rule settings for Workforce Engagement. This object is available in API version 53.0 and later.

[SearchLayout](#)

Represents a search layout defined for an object.

Tooling API Objects

[SecurityHealthCheck](#)

Represents your org's Health Check score. The score indicates how well your org's security settings comply with Salesforce-recommended values in the baseline standard. Only users with the "View Setup and Configuration" user permission can retrieve data from this object. Available in Tooling API version 37.0 and later.

[SecurityHealthCheckRisks](#)

Represents your org's security setting values, risks, and Salesforce-recommended setting values. Only users with the "View Setup and Configuration" user permission can retrieve data from this object. Available in Tooling API version 37.0 and later.

[ServiceFieldDataType](#)

Deprecated in API version 34.0, the ServiceFieldDataType object is removed in version 58.0 and later.

[Scontrol](#)

Represents a custom s-control, which is custom content that our system hosts, but client applications execute. An s-control can contain any type of content that you can display or run in a Web browser.

[ShiftSegmentType](#)

Represents shift segment type settings for Shift Scheduling and Workforce Engagement. This object is available in API version 55.0 and later.

[SiteDetail](#)

Represents the details of a Salesforce site or Experience Cloud site. Available in API version 38.0 and later.

[SOQLResult](#)

A complex type that represents the result of a SOQL query in an ApexExecutionOverlayResult object. Available from API version 28.0 or later.

[SourceMember](#)

Represents a single sObject of all source that you are tracking in an org. Examples of SourceMembers include Apex classes, custom objects, permission sets, and custom applications. Salesforce uses SourceMember objects to track what has changed in your org. Available in Tooling API version 41.0 and later.

[SourceMemberDeployRequest](#)

Reserved for internal use.

[StandardAction](#)

Represents the buttons, links, and actions (standard actions) for a standard or custom object. This object is available in API version 34.0 and later.

[StaticResource](#)

Represents the working copy of a static resource file for editing or saving. Static resources allow you to upload content that you can reference in a Visualforce page, including images, stylesheets, JavaScript, and other files. Available in Tooling API version 29.0 and later.

[SubscriberPackage](#)

Represents an installable package (first- or second-generation) across all Salesforce instances. Available in API version 41.0 and later.

[SubscriberPackageVersion](#)

Represents a package version (first- or second-generation) across all Salesforce instances. Available in API version 41.0 and later.

[SubscriberPackageVersionUninstallRequest](#)

Represents a request to uninstall a Package2Version (second-generation package version). Available in API version 41.0 and later.

[SvcCatalogCategory](#)

Represents the grouping of individual catalog items in Service Catalog. This object is available in API version 53.0 and later.

Tooling API Objects

[SvcCatalogCategoryItem](#)

Represents the assignment of this service to a category within the Service Catalog. This object is available in API version 53.0 and later.

[SvcCatalogFulfillFlowItem](#)

Represents a variable in a fulfillment flow for Service Catalog that can accept input. This object is available in API version 53.0 through 56.0.

[SvcCatalogFulfillmentFlow](#)

Represents the flow associated with a specific catalog item in the Service Catalog. This object is available in API version 53.0 and later.

[SvcCatalogItemDef](#)

Represents the grouping of individual catalog items in Service Catalog. This object is available in API version 53.0 and later.

[SymbolTable](#)

A complex type that represents all user-defined tokens in the `Body` of an `ApexClass`, `ApexClassMember`, or `ApexTriggerMember` and their associated line and column locations within the `Body`.

[TabDefinition](#)

Represents a tab, and returns all tabs available in the org. Available in API version 43.0 and later.

[TestSuiteMembership](#)

Associates an Apex class with an `ApexTestSuite`. Available in Tooling API version 36.0 and later.

[TimeSheetTemplate](#)

Represents a template for creating time sheets in Field Service. Available in API version 46.0 and later.

[TimeSheetTemplateAssignment](#)

Represents the assignment of a time sheet template to a profile. Available in API version 48.0 and later.

[TraceFlag](#)

Represents a trace flag that triggers an Apex debug log at the specified logging level.

[TransactionSecurityPolicy](#)

Represents a transaction security policy definition.

[User](#)

Represents a user. You can retrieve standard fields on `User` with the Tooling API, but custom fields can't be retrieved.

[UserAccessPolicy \(Beta\)](#)

Represents a user access policy. This object is available in API version 57.0 and later.

[UserAccessPolicyAction \(Beta\)](#)

Represents an action applied by the user access policy. This object is available in API version 57.0 and later.

[UserAccessPolicyFilter \(Beta\)](#)

Represents a user criteria filter for a user access policy. This object is available in API version 57.0 and later.

[UserCriteria](#)

Represents the member criteria to use in Experience Cloud site moderation rules. Available in Tooling API version 39.0 and later.

[UserEntityAccess](#)

Represents the access that the current user has to an object. Available in Tooling API version 34.0 and later.

[UserFieldAccess](#)

Represents the access that the current user has to a field. Available in Tooling API version 34.0 and later.

[ValidationRule](#)

Represents a validation rule or workflow rule which specifies the formula for when a condition is met. Available from API version 34.0 or later.

[VirtualVisitConfig](#)

Represents the configuration of an external video provider, which relays events from Salesforce to the provider. This object is available in API version 56.0 and later.

[WebLink](#)

Represents a custom button or link. Available in the Tooling API from API version 34.0 or later.

[WorkflowAlert](#)

Represents a workflow alert. A workflow alert is an email generated by a workflow rule or approval process and sent to designated recipients.

[WorkflowFieldUpdate](#)

Represents a workflow field update.

[WorkflowOutboundMessage](#)

Represents an outbound message. An outbound message sends information to a designated endpoint, like an external service. Outbound messages are configured from Setup. You must configure the external endpoint and create a listener for the messages using the SOAP API.

[WorkflowRule](#)

Represents a workflow rule that is used to fire off a specific workflow action when the specified criteria is met. Includes access to the associated WorkflowRule object in Salesforce Metadata API.

[WorkflowTask](#)

Represents a workflow task that is used to fire off a specific workflow action when the specified criteria is met. Includes access to the associated WorkflowRule object in Salesforce Metadata API.

[WorkSkillRouting](#)

Represents a setup object that stores a set of WorkSkillRoutingAttribute objects used to route a work item to an agent who has the skills necessary to take the work. Available in API version 46.0 and later.

[WorkSkillRoutingAttribute](#)

Represents a setup object that stores metadata related to the routing assignments between object field values and skills. Field values are used to route a work item to an agent who has the skills necessary to take the work. Available in API version 46.0 and later.

SEE ALSO:

[REST Overview](#)

[SOAP Calls](#)

ActivationPlatform

Represents metadata about ActivationPlatform, such as platform name, delivery schedule, output format, and destination folder. This object is available in API version 54.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|---------------|--|
| Description | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description The description for this ActivationPlatform.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name for the ActivationPlatform object.</p> <p>The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> |
| Enabled | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether this Activation Platform is enabled (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| FullName | <p>Type string</p> |

| Field | Details |
|---------------------|--|
| | <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated ActivationPlatform in Metadata API. The full name can include a namespace prefix.</p> |
| IncludeSegmentNames | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether to include the segment name in the metadata (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the ActivationPlatform. The value for this field is the language value of the org.</p> |
| LogoUrl | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description Logo for the activation channel destination.</p> |
| ManageableState | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package. Possible values are:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> |

| Field | Details |
|-----------------|--|
| | <ul style="list-style-type: none"> installedEditable released unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Label for the ActivationPlatform. In the UI, this field is ActivationPlatform.</p> |
| Metadata | <p>Type ActivationPlatform</p> <p>Properties Create, Nillable, Update</p> <p>Description Provides access to the associated type.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the ActivationPlatform.</p> |
| Notes | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description Notes for this ActivationPlatform.</p> |
| OutputFormat | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The output format of the file. Possible values are:</p> <ul style="list-style-type: none"> CSV JSON |

| Field | Details |
|--------------------------|---|
| | <ul style="list-style-type: none"> • PARQUET |
| OutputGrouping | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The grouping of the output. Possible values are:</p> <ul style="list-style-type: none"> • PER_ACCOUNT • PER_SEGMENT |
| PeriodicRefreshFrequency | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The full refresh frequency in days. Available in API version 55.0 and later.</p> |
| RefreshFrequency | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates how often the activation platform accepts data delivery in hours. Possible values are:</p> <ul style="list-style-type: none"> • TWENTY_FOUR |
| RefreshMode | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The mode of refreshing the file. Possible values are:</p> <ul style="list-style-type: none"> • INCREMENTAL |

AdvAcctFrcstDisplayGroup

Represents information about the groups for the advanced account forecast set measures or dimensions. This object is available in API version 57.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|------------------------------|--|
| AdvAccountForecastSetId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The forecast set associated with the advanced account forecast display group. This field is a polymorphic relationship field.</p> <p>Relationship Name AdvAccountForecastSet</p> <p>Relationship Type Lookup</p> <p>Refers To AdvAccountForecastSet, SalesAgreementSettings</p> |
| AdvAcctFrcstDisplayGroupName | <p>Type string</p> <p>Properties Create, Filter, Group, idLookup, Sort, Update</p> <p>Description The name of the advanced account forecast group.</p> |
| GroupType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> |

| Field | Details |
|---------------|---|
| | Description Specifies the category for the display group. Possible value is: MEASURE |
| IsDefault | Type boolean Properties Create, Defaulted on create, Filter, Group, Sort, Update Description Indicates whether the display group is the default group. The default value is <code>false</code> . |
| UserProfileId | Type reference Properties Create, Filter, Group, Nillable, Sort, Update Description The profile for which the display group is applicable. This field is a relationship field. Relationship Name UserProfile Relationship Type Lookup Refers To Profile |

AdvAccountForecastSet

Represents an advanced account forecast set. This object is available in API version 56.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.

Supported SOAP API Calls


`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|----------------------|--|
| AccountFieldName | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The field name of the account in an advanced account forecast fact record.</p> |
| CalculationFrequency | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The frequency at which a forecast set is recalculated automatically. Possible values are:</p> <ul style="list-style-type: none"> • Monthly • Quarterly • Weekly • Yearly <p>The default value is Monthly.</p> |
| Description | <p>Type textarea</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The description for AdvAccountForecastSet.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the advanced account forecast set record. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not</p> |

| Field | Details |
|---------------------------|---|
| | <p>include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> |
| ForecastFactObjectName | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The API name of the entity used as a facts table.</p> |
| ForecastPeriodGroupId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description The Id of the forecast period group associated with an advanced account forecast. This field is a relationship field.</p> <p>Relationship Name ForecastPeriodGroup</p> <p>Relationship Type Lookup</p> <p>Refers To AdvAcctForecastPeriodGroup</p> |
| ForecastQuantityFieldName | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The field name of the forecast quantity in an advanced account forecast fact record.</p> |
| ForecastRevenueFieldName | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> |

| Field | Details |
|-------------------------|--|
| | Description The field name of the forecast revenue in an advanced account forecast record. |
| ForecastSetFieldName | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort Description The field name of the forecast set in an advanced account forecast record. |
| ForecastSetName | Type string Properties Filter, Group, idLookup, Sort Description The name of the forecast set in an advanced account forecast record. |
| ForecastStatusFieldName | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort Description The field name of the status in an advanced account forecast fact record. |
| FullName | Type string Properties Create, Group, Nillable Description The full name of the associated advanced account forecast fact record in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |
| GenerationDpeDefNameId | Type reference Properties Filter, Group, Nillable, Sort Description The name of the Data Processing Engine definition that generates advanced account forecast fact records. |

| Field | Details |
|-------------------------|--|
| | <p>This field is a relationship field.</p> <p>Relationship Name GenerationDpeDefName</p> <p>Relationship Type Lookup</p> <p>Refers To BatchCalcJobDefinition</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language for AdvAccountForecastSet.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Label for the AdvAccountForecastSet record.</p> |
| Metadata | <p>Type complexvalue</p> <p>Properties Create, Nillable, Update</p> <p>Description The AdvAccountForecastSet's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| PeriodFieldName | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The field name of the period in an advanced account forecast fact record.</p> |
| RecalculateDpeDefNameId | <p>Type reference</p> |

| Field | Details |
|--------------------------|--|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The Data Processing Engine definition used to recalculate advanced account forecast fact records. This field is a relationship field.</p> <p>Relationship Name RecalculateDpeDefName</p> <p>Relationship Type Lookup</p> <p>Refers To BatchCalcJobDefinition</p> |
| RegenerationDpeDefNameId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The Data Processing Engine definition used to regenerate advanced account forecast fact records. This field is a relationship field.</p> <p>Relationship Name RegenerationDpeDefName</p> <p>Relationship Type Lookup</p> <p>Refers To BatchCalcJobDefinition</p> |
| RolloverDpeDefNameId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The Data Processing Engine definition used to generate rollover advanced account forecast fact records. This field is a relationship field.</p> <p>Relationship Name RolloverDpeDefName</p> <p>Relationship Type Lookup</p> |

| Field | Details |
|-------------------|--|
| | Refers To BatchCalcJobDefinition |
| RolloverFrequency | Type picklist Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort Description The frequency of rollover of an advanced account forecast records. Possible values are: <ul style="list-style-type: none"> Monthly Quarterly Weekly Yearly The default value is <code>Monthly</code> . |
| Status | Type picklist Properties Filter, Group, Restricted picklist, Sort Description Specifies the status of an advanced account forecast set. Possible values are: <ul style="list-style-type: none"> Active Inactive |

AdvAcctForecastMeasureDef

Represents information about the measures to be displayed in the advanced account forecasts grid for the forecast set. This object is available in API version 57.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|-------------------------------|---|
| AdvAccountForecastSetId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The forecast set associated with the advanced account forecast metric. This can also reference the <code>SalesAgreementSettings</code>. This field is a relationship field.</p> <p>Relationship Name AdvAccountForecastSet</p> <p>Relationship Type Lookup</p> <p>Refers To AdvAccountForecastSet</p> |
| AdvAcctForecastMeasureDefName | <p>Type string</p> <p>Properties Create, Filter, Group, idLookup, Sort, Update</p> <p>Description Name of the advanced account forecast measure definition.</p> |
| AggregationType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The type of aggregation used for calculating advanced account forecast values. Possible values are:</p> <ul style="list-style-type: none"> • AVERAGE—Average • MAXIMUM—Maximum • MINIMUM—Minimum • SUM—Sum <p>The default value is SUM.</p> |
| ComputationMethod | <p>Type picklist</p> |

| Field | Details |
|-------------------------|---|
| | <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The method used for calculating advanced account forecast values.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> CUSTOM—Custom DATA_PROCESSING_ENGINE_DEFINITION—Data Processing Engine definition FORMULA—Formula <p>The default value is DATA_PROCESSING_ENGINE_DEFINITION.</p> |
| ForecastDataMeasureName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Field of the facts object used for this measure.</p> |
| ForecastMeasureName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The name for the measure to show on UI.</p> |
| ForecastMeasureType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description Specifies the measure type used for the generated advanced forecast values.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> QUANTITY—Quantity REVENUE—Revenue <p>The default value is QUANTITY.</p> |
| IsAdjustmentTracked | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> |

| Field | Details |
|-------|--|
| | <p>Description</p> <p>Indicates whether the adjustments made to the advanced account forecast values for this metric are tracked.</p> <p>The default value is <code>false</code>.</p> |

AIApplication

Represents an instance of a machine learning (ML) application. Available in API version 50.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.


Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|---------------|---|
| DeveloperName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow as a <code>DeveloperName</code> is generated for each record.</p> |


| Field | Details |
|-----------------|---|
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated AIApplication type in Metadata API. The full name can include a namespace prefix. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the AIApplication.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Label that identifies the AIApplication throughout the Salesforce user interface.</p> |

| Field | Details |
|-------------------------|---|
| Metadata | <p>Type AIApplication</p> <p>Properties Create, Nillable, Update</p> <p>Description The AIApplication's metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| MLPredictionDefinitions | <p>Type QueryResult</p> <p>Properties Nillable</p> <p>Description A list of machine learning (ML) prediction definition records associated with an ML application record.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation. The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, NamespacePrefix is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| Status | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Restricted picklist, Nillable, Sort</p> |

| Field | Details |
|-------|--|
| | Description The status of the application. Valid values are: <ul style="list-style-type: none"> • Disabled—0 • Draft—3 • Enabled—1 • Migrated—2 |
| Type | Type picklist Properties Filter, Group, Restricted picklist, Nillable, Sort Description The type of application. Valid values are: <ul style="list-style-type: none"> • PredictionBuilder—5 • RecommendationBuilder—14 |

AIApplicationConfig

Represents additional prediction information related to a machine learning (ML) application. Available in API version 50.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls


`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|---------------|--|
| ApplicationId | Type reference Properties Filter, Group, Nillable, Sort |

| Field | Details |
|------------------------|---|
| | <p>Description The ID of the parent ML application. This is a relationship field.</p> <p>Relationship Name Application</p> <p>Relationship Type Lookup</p> <p>Refers To AIApplication</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow as a DeveloperName is generated for each record.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated AIApplicationConfig type in Metadata API. The full name can include a namespace prefix. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsInsightReasonEnabled | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Sort</p> |

| Field | Details |
|-----------------|---|
| | Description When true, generates the predictors or field values that were used to generate the prediction value. |
| Language | Type picklist Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort Description The language of the AIApplicationConfig. |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort Description Indicates the manageable state of the specified component that is contained in a package: <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | Type string Properties Filter, Group, Nillable, Sort Description Label that identifies the AIApplicationConfig throughout the Salesforce user interface. |
| Metadata | Type AIApplicationConfig Properties Create, Nillable, Update Description The AIApplicationConfig's metadata. |

| Field | Details |
|-----------------|---|
| | <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, NamespacePrefix is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| Rank | <p>Type int</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Sort</p> <p>Description Reserved for future use.</p> |
| ScoringMode | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Restricted picklist, Nillable, Sort</p> <p>Description Frequency with which the prediction scores are written back. Valid values are:</p> <ul style="list-style-type: none"> • Batch • OnDemand • Streaming |

AnimationRule

Represents criteria for determining when an animation is displayed to Path users. Available in API version 46.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.


Supported SOAP Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|--------------------|---|
| AnimationFrequency | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Required. The frequency with which an animation is displayed when a user selects the designated picklist values in a path. Valid values are:</p> <ul style="list-style-type: none">• <code>always</code>• <code>often</code>• <code>sometimes</code>• <code>rarely</code> <p>A value of <code>always</code> triggers an animation every time. The values <code>often</code>, <code>sometimes</code>, and <code>rarely</code> trigger an animation progressively less frequently.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort, Update</p> <p>Description The developer name for the animation rule.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |

| Field | Details |
|-------------|--|
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the animation rule is active (<code>true</code>) or not (<code>false</code>).</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The language in the user's personal settings.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The label for the animation rule.</p> |
| Metadata | <p>Type complexvalue</p> <p>Properties Create, Nillable, Update</p> <p>Description AnimationRule metadata from the mns namespace. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|---------------------------|---|
| RecordTypeContext | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description An enum to track whether this AnimationRule applies to all record types for the associated sObject, or only to a single or main record type. Valid values are <code>All</code>, <code>Custom</code>, and <code>Master</code>.</p> |
| RecordTypeId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The record type selected for the sObject in which the animation is displayed.</p> |
| SubjectType | <p>Type string</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The object on which the animation rule is run.</p> |
| TargetField | <p>Type string</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Name of the field used to determine when to display an animation.</p> |
| TargetFieldChangeToValues | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Values used to determine when to display an animation. When a user selects a value in <code>TargetField</code> that matches a value stored in <code>TargetFieldChangeToValues</code>, the animation is displayed.</p> |

ApexClass

Represents the saved copy of an Apex class. ApexClass uses the cached version of the class unless one is unavailable. Available from API version 28.0 or later.

To edit, save, or compile Apex classes, use [ApexClassMember](#).

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST API HTTP Methods

GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|------------|---|
| ApiVersion | Type double Properties Create, Filter, Sort, Update Description The API version for this class. Every class has an API version specified at creation. |
| Body | Type textarea Properties Create, Nillable, Update Description The data for the Apex class. |
| BodyCrc | Type double Properties Create, Defaulted on create, Filter, Nillable, Sort, Update Description The CRC (cyclic redundancy check) of the class or trigger file |
| FullName | Type string Properties Group, Nillable |

| Field Name | Details |
|-----------------------|--|
| | <p>Description</p> <p>The full name of the associated object in the Metadata API. Use to avoid race conditions on create, before you have IDs.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsValid | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description</p> <p>Indicates whether any dependent metadata has changed since the class was last compiled (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| LengthWithoutComments | <p>Type</p> <p>int</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Update</p> <p>Description</p> <p>Length of the class without comments.</p> |
| ManageableState | <p>Type</p> <p>ManageableState enumerated list</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> • <code>installedEditable</code> • <code>released</code> • <code>unmanaged</code> <p>This field is available in API version 38.0 and later.</p> |
| Metadata | <p>Type</p> <p>ApexClassMetadata</p> |

| Field Name | Details |
|-----------------|--|
| | <p>Properties Create, Nillable, Update</p> <p>Description An object that describes the version, status, and packaged versions of the corresponding Apex class.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Name | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Name of the class. Limit: 255 characters</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There's an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that aren't Developer Edition organizations, NamespacePrefix is only set for objects that are part of an installed managed package. There's no namespace prefix for all other objects. |
| Status | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> |

| Field Name | Details |
|-------------|---|
| | <p>Description</p> <p>The current status of the Apex class. Valid values are:</p> <ul style="list-style-type: none"> • Active—The class is active. • Deleted—The class is marked for deletion. This status is useful for managed packages, because it allows a class to be deleted when a managed package is updated. • Inactive—This option is unused and is only supported for ApexTrigger. For more information, see the Metadata API Developer Guide. |
| SymbolTable | <p>Type</p> <p>SymbolTable</p> <p>Properties</p> <p>Nullable</p> <p>Description</p> <p>A complex type that represents all user-defined tokens in the Body of an ApexClass, ApexClassMember, or ApexTriggerMember and their associated line and column locations within the Body.</p> <p>This field is null if the symbol table can't be created due to reasons such as:</p> <ul style="list-style-type: none"> • Another Apex compilation is in progress and holding a compile lock • The Apex class is in an invalid state and can't compile successfully |

Usage

To retrieve information about an Apex class, create an ApexClass object that references it. For example code, see [SOAP Calls](#).

To edit, save, or compile Apex classes, use [ApexClassMember](#).



Note: If there isn't a cached version of [SymbolTable](#), it's compiled in the background and the query can take longer than expected. The SymbolTable returned from ApexClass doesn't contain references. To retrieve a SymbolTable with references, use [ApexClassMember](#).

Although Apex classes and triggers have the Create and Update field properties, a runtime exception occurs if you try to create, update, or delete them using the API. Instead, use the Salesforce Extensions for Visual Studio Code or the Ant Migration Tool to create or update Apex classes or triggers. Apex classes and triggers can't be created, edited, or deleted in a production org. See [Deploying Apex](#).

ApexClassMember

Represents the working copy of an Apex class for editing, saving, or compiling in a MetadataContainer.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Special Access Rules

As of the Spring '20 release, to access ApexClassMember you must have both the View All Data and the Author Apex user permissions.

Fields

| Field Name | Details |
|-----------------|--|
| Body | <p>Type string</p> <p>Properties Create, Update</p> <p>Description The data for the Apex class. The <code>Body</code> field is the only field you can <code>update ()</code> or <code>PATCH</code>.</p> |
| Content | <p>Type string</p> <p>Properties None</p> <p>Description A string representation of ApexClassMetadata that lists the version, status, and packaged versions of the corresponding Apex class.</p> |
| ContentEntityId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description A reference to an Apex class. There can be only one <code>ContentEntityId</code> per ApexClassMember, otherwise, an error is reported. This field is required if <code>FullName</code> is not specified.</p> |
| FullName | <p>Type string</p> <p>Properties Group, Nillable</p> |

| Field Name | Details |
|---------------------|--|
| | <p>Description</p> <p>The full name of the associated object in the Metadata API. Use to avoid race conditions on create, before you have IDs.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> <p>This field is required if <code>ContentEntityId</code> is not specified.</p> |
| LastSyncDate | <p>Type</p> <p>dateTime</p> <p>Properties</p> <p>Filter, Sort</p> <p>Description</p> <p>The date and time that this ApexClassMember Body was replicated from the underlying Apex class.</p> <p>When you deploy a MetadataContainer, this value is compared with the <code>LastModifiedDate</code> of the underlying Apex class. If <code>LastSyncDate</code> is older than <code>LastModifiedDate</code>, the deployment fails with an error.</p> |
| Metadata | <p>Type</p> <p>ApexClassMetadata</p> <p>Properties</p> <p>None</p> <p>Description</p> <p>An object that describes the version, status, and packaged versions of the corresponding Apex class.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| MetadataContainerId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Sort</p> <p>Description</p> <p>A reference to a MetadataContainer or ContainerAsyncRequest object.</p> <p>As part of a successful deployment, this field is reset from the ID of the deployed MetadataContainer to the ID of the corresponding ContainerAsyncRequest object.</p> <p>This field is required.</p> |
| SymbolTable | <p>Type</p> <p>SymbolTable</p> |

| Field Name | Details |
|------------|---|
| | <p>Properties</p> <p>Nullable</p> <p>Description</p> <p>A complex type that represents all user-defined tokens in the <code>Body</code> of an <code>ApexClass</code>, <code>ApexClassMember</code>, or <code>ApexTriggerMember</code> and their associated line and column locations within the <code>Body</code>.</p> <p>This field is null if the symbol table can't be created. A symbol table can't be created if the content referenced by the <code>ContentEntityId</code> field doesn't use a symbol table. Compiler errors for the last deployment of the MetadataContainer in the <code>MetadataContainerId</code> field also prevent a symbol table from being created.</p> |

Usage

To edit, save, or compile an Apex class, create an `ApexClassMember` object that references it.



Note: Once an `ApexClassMember` is successfully deployed in a [MetadataContainer](#), the `MetadataContainerId` is changed to the ID of the [ContainerAsyncRequest](#), and the `ApexClassMember` can't be modified or reused.

Apex classes are often dependent on each other for functionality. For example, a method in one class can call a method in another class. If source file A is dependent on modified source file B and you try to save and compile source file A before you've saved the changes to source file B, the compiler throws an error. To successfully save and compile a group of related source files, put the corresponding `ApexClassMember` and `ApexTriggerMember` objects in a single `MetadataContainer` object.

Each `ApexClassMember` object can only refer to a single `MetadataContainer` object. Multiple `ApexClassMember` objects can refer to the same `MetadataContainer` object.

ApexCodeCoverage

Represents code coverage test results for an Apex class or trigger. Available in Tooling API version 29.0 and later.

Supported SOAP API Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST API HTTP Methods

`Query`, `GET`

Special Access Rules

In API version 49.0 and later, users must have the View Setup and Configuration permission to access this object.

Fields

| Field | Details |
|----------------------|---|
| ApexTestClassId | Type string Properties Filter, Group, Sort Description The ID of the test class. |
| TestMethodName | Type string Properties Filter, Group, Sort Description The name of the test method. |
| ApexClassorTriggerId | Type string Properties Filter, Group, Sort Description The ID of the class or trigger under test. |
| NumLinesCovered | Type int Properties Filter, Group, Sort Description The number of covered lines. |
| NumLinesUncovered | Type int Properties Filter, Group, Sort Description The number of uncovered lines. |
| Coverage | Type complexvalue Properties None |

| Field | Details |
|-------|--|
| | <p>Description</p> <p>Two lists of integers. The first is the covered lines, and the second is the list of uncovered lines. If a line is missing from both lists, the line isn't executable and doesn't require coverage.</p> <p>Coverage includes the following fields:</p> <ul style="list-style-type: none"> • <code>coveredLines</code> • <code>namespace</code> • <code>uncoveredLines</code> |

Usage


To query for code coverage, specify an Apex class, test class, or both. The returned JSON or XML object will contain two lists of integers: one for covered and one for uncovered lines.

The following example SOQL query retrieves code coverage results for a specific class or trigger covered by a specific test class:

```
SELECT Coverage
FROM ApexCodeCoverage
WHERE ApexClassOrTrigger = '01pD000000066GR'
AND ApexTestClass = '01pD000000064pu'
```

For per-class code coverage, the query would be:

```
SELECT Coverage
FROM ApexCodeCoverage
WHERE ApexClassOrTrigger = '01pD000000066GR'
```

 **Note:** In this case, multiple rows may be returned, since there may be multiple test classes that cover the same test class.

As noted above, `Coverage` is returned as two lists of integers. The first is the covered lines, and the second is the list of uncovered lines. If a line is missing from both lists, the line isn't executable and doesn't require coverage. For example, if the covered lines are 2, 9, and 11, and uncovered lines are 3, 4, 5, and 6; the result would be: { 2, 9, 11 }, { 3, 4, 5, 6 }. The missing lines (1, 7, 8 and 10) aren't executable.

Code coverage percentage is a simple calculation of the number of covered lines divided by the sum of the number of covered lines and the number of uncovered lines. For example, to calculate code coverage percentage in SOAP:

```
ApexCodeCoverage acc = null; //Query for an ApexCodeCoverage object
Coverage coverage = acc.coverage;
int[] covered = coverage.coveredLines;
int[] uncovered = coverage.uncoveredLines;
int percent = covered.length / (covered.length + uncovered.length);
System.out.println("Total class coverage is " + percent + "%.");
```

ApexCodeCoverageAggregate

Represents aggregate code coverage test results for an Apex class or trigger. Available in Tooling API version 29.0 and later.

Supported SOAP API Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST API HTTP Methods

Query, GET, DELETE

Special Access Rules

In API version 49.0 and later, users must have the View Setup and Configuration permission to access this object.

Fields

| Field | Details |
|----------------------|---|
| ApexClassorTriggerId | Type string Properties Filter, Group, Sort Description The ID of the class or trigger under test. |
| NumLinesCovered | Type int Properties Filter, Group, Sort Description The number of covered lines. |
| NumLinesUncovered | Type int Properties Filter, Group, Sort Description The number of uncovered lines. |
| Coverage | Type complexvalue Properties None Description Two lists of integers. The first is the covered lines, and the second is the list of uncovered lines. If a line is missing from both lists, the line isn't executable and doesn't require coverage. |

| Field | Details |
|-------|--|
| | <p>Coverage includes the following fields:</p> <ul style="list-style-type: none"> coveredLines namespace uncoveredLines |

Usage

To query for aggregate code coverage, specify an Apex test class. The returned JSON or XML object will contain two lists of integers: one for covered and one for uncovered lines. For examples, see [ApexCodeCoverage](#).

ApexComponent

Represents the saved copy of a Visualforce component. ApexComponent uses the cached version of the class unless one is unavailable. Available from API version 28.0 or later.

To edit, save, or compile Visualforce components, use [ApexComponentMember](#).

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|-----------------|---|
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> beta deleted deprecated deprecatedEditable installed |

| Field Name | Details |
|------------|---|
| | <ul style="list-style-type: none"> • <code>installedEditable</code> • <code>released</code> • <code>unmanaged</code> <p>This field is available in API version 38.0 and later.</p> |

Usage

To retrieve information about a Visualforce component, create an `ApexComponent` object that references it. For example code, see [SOAP Calls](#).

To edit, save, or compile Visualforce components, use [ApexComponentMember](#).

ApexComponentMember

Represents the working copy of a Visualforce component for editing, saving, or compiling in a `MetadataContainer`.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, to access `ApexComponentMember`, users must have both the View All Data and Customize Application permissions.

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|------------|--|
| Body | <p>Type string</p> <p>Properties Create, Update</p> <p>Description The data for the Visualforce component. The <code>Body</code> field is the only field you can <code>update()</code> or <code>PATCH</code>.</p> |

| Field Name | Details |
|-----------------|---|
| Content | <p>Type string</p> <p>Properties None</p> <p>Description A string representation of ApexComponentMetadata that lists the version, status, and packaged versions of the corresponding Visualforce component.</p> |
| ContentEntityId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description A reference to a Visualforce component. There can be only one ContentEntityId per ApexComponentMember, otherwise, an error is reported. This field is required if FullName is not specified.</p> |
| FullName | <p>Type string</p> <p>Properties Group, Nillable</p> <p>Description The full name of the associated object in the Metadata API. Use to avoid race conditions on create, before you have IDs. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. This field is required if ContentEntityId is not specified.</p> |
| LastSyncDate | <p>Type dateTime</p> <p>Properties Filter, Sort</p> <p>Description The date that this ApexComponentMember Body was replicated from the underlying entity. When you deploy a MetadataContainer, this value is compared with the LastModifiedDate of the underlying Visualforce component. If LastSyncDate is older than LastModifiedDate, the deployment fails with an error.</p> |

| Field Name | Details |
|---------------------|--|
| Metadata | <p>Type ApexComponentMetadata</p> <p>Properties None</p> <p>Description An object that describes the version, status, and packaged versions of the corresponding Visualforce component. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| MetadataContainerId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description A reference to a MetadataContainer or ContainerAsyncRequest object. As part of a successful deployment, this field is reset from the ID of the deployed MetadataContainer to the ID of the corresponding ContainerAsyncRequest object. This field is required.</p> |

Usage

To edit, save, or compile a Visualforce component, create an ApexComponentMember object that references it. To create a Visualforce component, use the REST API or the Metadata API.



Note: Once an ApexComponentMember is successfully deployed in a [MetadataContainer](#), the `MetadataContainerId` is changed to the ID of the [ContainerAsyncRequest](#), and the ApexComponentMember can't be modified or reused.

Visualforce pages and components are often dependent on each other for functionality. To successfully save and compile a group of related source files, put the corresponding ApexComponentMember and ApexPageMember objects in a single MetadataContainer object.

Each ApexComponentMember object can only refer to a single MetadataContainer object. Multiple ApexComponentMember objects can refer to the same MetadataContainer object.

SEE ALSO:

[REST API Developer Guide](#)

[Metadata API Developer Guide](#)

ApexEmailNotification

Stores a Salesforce user ID or external email address to be notified when unhandled Apex exceptions occur. This object is available in API version 35.0 and later.



Note: Each ApexEmailNotification contains either an email or a user ID, but not both.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|--------|--|
| Email | <p>Type string</p> <p>Properties Create, Filter, Group, idLookup, Nillable, Sort, Update</p> <p>Description The external email address to which the notification is sent. Mutually exclusive with the <code>UserId</code> field.</p> |
| UserId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description ID of the user to which the notification is sent. Mutually exclusive with the <code>Email</code> field. This is a relationship field.</p> <p>Relationship Name User</p> <p>Relationship Type Lookup</p> <p>Refers To User</p> |

Usage

To notify users of your org at the email addresses they have on record, use `UserId`. To notify external users or alternate email addresses, use `Email`.

SEE ALSO:

[Apex Developer Guide: Exceptions in Apex](#)

ApexExecutionOverlayAction

Specifies an Apex code snippet or SOQL query to execute at a specific line of code in an Apex class or trigger. Optionally, generates a heap dump.

Supported SOAP Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|------------------|---|
| ActionScript | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>The Apex code or SOQL query to run when execution reaches the line in the Apex class or trigger at the specified iteration. Results are included in the heap dump file.</p> |
| ActionScriptType | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description</p> <p>Indicates whether the <code>ActionScript</code> is written in Apex or SOQL. Valid values are:</p> <ul style="list-style-type: none">• None• Apex• SOQL |

| Field Name | Details |
|-----------------------------------|---|
| | <p>If a value for this field is not supplied, or if an empty string is supplied for this value, a default value of <code>None</code> is used.</p> |
| <code>ExecutableEntityId</code> | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The ID of the Apex class or trigger being executed.</p> <p>This field is required if <code>ExecutableEntityName</code> is not provided. If both <code>ExecutableEntityName</code> and <code>ExecutableEntityId</code> are provided, <code>ExecutableEntityId</code> takes precedence.</p> |
| <code>ExecutableEntityName</code> | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description The Apex typeRef of the class or trigger being executed. A type lookup is done and, if the typeRef is valid, <code>ExecutableEntityId</code> is set to the ID of the class or trigger.</p> <p>For a trigger, the typeRef must begin with the SFDC trigger prefix <code>__sfdc_trigger/</code>. For example, <code>__sfdc_trigger/YourTriggerName</code> or <code>__sfdc_trigger/YourNamespace/YourTriggerName</code>.</p> <p>For a class, use the format <code>YourClass</code>, <code>YourClass\$YourInnerClass</code>, or <code>YourNamespace/YourClass\$YourInnerClass</code>.</p> <p>This field is required if <code>ExecutableEntityId</code> is not provided. If both <code>ExecutableEntityName</code> and <code>ExecutableEntityId</code> are provided, <code>ExecutableEntityId</code> takes precedence.</p> |
| <code>ExpirationDate</code> | <p>Type dateTime</p> <p>Properties Create, Filter, Sort, Update</p> <p>Description The expiration date of the overlay action.</p> <p>If no value is provided for this field, a default value of 30 minutes from the current time is used.</p> |
| <code>IsDumpingHeap</code> | <p>Type boolean</p> |

| Field Name | Details |
|------------|---|
| | <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether a heap dump is generated (<code>true</code>) or not (<code>false</code>). To execute the <code>ActionScript</code> without generating a heap dump, set this field to <code>false</code>. If no value for this field is provided, a default value of <code>true</code> is used.</p> |
| Iteration | <p>Type int</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The number of times to execute the specified line execute before the heap dump is generated. This field is required.</p> |
| Line | <p>Type int</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The line number of the heap dump marker. This field is required.</p> |
| ScopeId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The user who executed the action. If no value for this field is provided, <code>ScopeId</code> is set to your <code>UserId</code> value.</p> |

Usage

When you are troubleshooting a runtime issue, use `ApexExecutionOverlayAction` to overlay a diagnostic output on an Apex class or trigger without compromising production code. Use the resulting `ApexExecutionOverlayResult` to find out more about the state of a variable or of the database or to test your code using specific conditions.

ApexExecutionOverlayResult

Represents the result from the Apex code snippet or SOQL query defined in the associated `ApexExecutionOverlayAction`, and the resulting heap dump if one was returned. Available from API version 28.0 or later.

Supported SOAP Calls

`query()`, `retrieve()`, `delete()`

Supported REST HTTP Methods

`Query`, `GET`, `DELETE`

Fields

| Field Name | Details |
|------------------|---|
| ActionScript | Type string Properties Nillable Description The Apex code or SOQL query that was run. |
| ActionScriptType | Type picklist Properties Filter, Group, Sort, Nillable Description Indicates whether the <code>ActionScript</code> is written in Apex or SOQL. Valid values are: <ul style="list-style-type: none">• None• Apex• SOQL |
| ApexResult | Type ApexResult Properties Nillable Description A complex type that represents the result of Apex code executed as part of an <code>ApexExecutionOverlayAction</code> , returned in an <code>ApexExecutionOverlayResult</code> . |
| ExpirationDate | Type dateTime Properties Filter, Sort Description The expiration date of the overlay action. |

| Field Name | Details |
|---------------|--|
| HeapDump | <p>Type HeapDump</p> <p>Properties Nillable</p> <p>Description A complex type that represents a heap dump in an ApexExecutionOverlayResult object. You can only have a single row when using HeapDump in SOQL. To select only one row, you can use a LIMIT=1 clause in your SOQL query, or you can list multiple rows for the user and have them select the row to inspect.</p> |
| IsDumpingHeap | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether a heap dump was generated (<code>true</code>) or not (<code>false</code>).</p> |
| Iteration | <p>Type int</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The number of times the specified line should execute before the heap dump is generated. This field is required.</p> |
| Line | <p>Type int</p> <p>Properties Filter, Group, Sort, Nillable</p> <p>Description The line number of the checkpoint.</p> |
| SOQLResult | <p>Type SOQLResult</p> <p>Properties Nillable</p> <p>Description A complex type that represents the result of a SOQL query in an ApexExecutionOverlayResult object.</p> |
| UserId | <p>Type reference</p> |

| Field Name | Details |
|------------|---|
| | Properties Filter, Group, Sort, |
| | Description The user who executed the action. |

Usage

When you are troubleshooting a runtime issue, you often want to find out more about the state of a variable or the state of the database, or create a specific condition to test your code. Use [ApexExecutionOverlayAction](#) to overlay a diagnostic output on an Apex class or trigger without compromising production code, and use `ApexExecutionOverlayResult` to navigate the results.

ApexLog

Represents a debug log.

To retrieve a raw log by ID, use the REST resource: `/subjects/ApexLog/id/Body/`. (Available from API version 28.0 or later.)

Supported SOAP Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

Query, GET, DELETE

Fields

| Field | Details |
|----------------------|--|
| Application | Type textarea |
| | Properties Filter, Group, Sort |
| | Description This value depends on the client type that triggered the log or heap dump. <ul style="list-style-type: none"> For API clients, this value is the client ID. For browser clients, this value is <code>Browser</code>. This field is required. |
| DurationMilliseconds | Type int |

| Field | Details |
|-----------|---|
| | Properties Filter, Group, Sort Description The duration of the transaction in milliseconds. This field is required. |
| Location | Type picklist Properties Filter, Group, Sort, Nillable, Restricted picklist Description Specifies the location of the origin of the log or heap dump. Values are: <ul style="list-style-type: none"> • Monitoring—Generated as part of debug log monitoring, and visible to all administrators. These types of logs are maintained for seven days or until a user deletes them. • SystemLog—Generated as part of system log monitoring, and visible only to you. These types of logs are maintained for 24 hours or until the user clears them. |
| LogLength | Type int Properties Filter, Group, Sort Description Length of the log or heap dump in bytes. This field is required. |
| LogUserId | Type reference Properties Filter, Group, Sort, Nillable Description ID of the user whose actions triggered the debug log or heap dump. |
| Operation | Type string Properties Filter, Group, Sort Description Name of the operation that triggered the debug log or heap dump, such as <code>APEXSOAP</code> , <code>Apex Sharing Recalculation</code> , and so on. This field is required. |
| Request | Type string |

| Field | Details |
|----------------------------------|---|
| | <p>Properties Filter, Group, Sort</p> <p>Description Request type. Values are:</p> <ul style="list-style-type: none"> • <code>API</code>—Request came from an API. • <code>Application</code>—Request came from the Salesforce user interface. <p>This field is required.</p> |
| <code>RequestIdIdentifier</code> | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique identifier of the request that triggered the debug log. Use this request identifier to correlate multiple debug logs triggered by the same request.</p> |
| <code>StartTime</code> | <p>Type dateTime</p> <p>Properties Filter, Sort</p> <p>Description Start time of the transaction. This field is required.</p> |
| <code>Status</code> | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Status of the transaction. This value is either <code>Success</code>, or the text of an unhandled Apex exception. This field is required.</p> |

ApexOrgWideCoverage

Represents code coverage test results for an entire organization. Available in Tooling API version 29.0 and later.

Supported SOAP API Calls

`describeSObjects()`, `delete()`, `query()`, `retrieve()`

Supported REST API HTTP Methods

Query, GET, DELETE

Special Access Rules

In API version 49.0 and later, users must have the View Setup and Configuration permission to access this object.

Fields

| Field | Details |
|----------------|--|
| PercentCovered | Type int Properties Filter, Group, Nillable, Sort Description The percentage of the code in the organization that is covered by tests. |

ApexPage

Represents the saved copy of a Visualforce page. ApexPage uses the cached version of the page unless one is unavailable. Available from API version 28.0 or later.

To edit, save, or compile Visualforce pages, use [ApexPageMember](#).

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|------------|--|
| ApiVersion | Type double Properties Create, Filter, Sort, Update |

| Field Name | Details |
|----------------|---|
| | <p>Description</p> <p>The API version for the page. Every page has an API version specified at creation. If the API version is less than 15.0 and <code>ApiVersion</code> is not specified, <code>ApiVersion</code> defaults to 15.0. This field is available in API version 30.0 and later.</p> |
| ControllerKey | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The identifier for the controller associated with this page:</p> <ul style="list-style-type: none"> If <code>ControllerType</code> is set to <code>Standard</code> or <code>StandardSet</code>, this value is the name of the sObject that defines the controller. If <code>ControllerType</code> is set to <code>Custom</code>, this value is the name of the Apex class that defines the controller. <p>This field is available in API version 30.0 and later.</p> |
| ControllerType | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description</p> <p>The type of controller associated with this Visualforce page. Possible values include:</p> <ul style="list-style-type: none"> <code>Not Specified</code>, for pages defined with neither a <code>standardController</code> nor a <code>controller</code> attribute on the <code><apex:page></code> tag <code>Standard</code>, for pages defined with the <code>standardController</code> attribute on the <code><apex:page></code> tag <code>StandardSet</code>, for pages defined using the <code>standardController</code> and <code>recordSetVar</code> attribute on the <code><apex:page></code> tag <code>Custom</code>, for pages defined with the <code>controller</code> attribute on the <code><apex:page></code> tag <p>This field is available in API version 30.0 and later.</p> |
| Description | <p>Type</p> <p>textarea</p> <p>Properties</p> <p>Create, Filter, Nillable, Sort, Update</p> <p>Description</p> <p>Description of the Visualforce page. This field is available in API version 30.0 and later.</p> |

| Field Name | Details |
|-----------------------------|---|
| FullName | <p>Type string</p> <p>Properties Create, Filter, Group, idLookup, Sort, Update</p> <p>Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. This field is available in API version 36.0 and later.</p> |
| IsAvailableInTouch | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates if Visualforce tabs associated with the Visualforce page can be used in the Salesforce mobile app (<code>true</code>) or not (<code>false</code>). (Use of this field for Salesforce Touch is deprecated.) This field is available in API version 30.0 and later. Standard object tabs that are overridden with a Visualforce page aren't supported in the Salesforce mobile app, even if you set this field for the page. The default Salesforce app page for the object is displayed instead of the Visualforce page.</p> |
| IsConfirmationTokenRequired | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether <code>GET</code> requests for the page require a CSRF confirmation token (<code>true</code>) or not (<code>false</code>). This field is available in API version 30.0 and later. If you change this field's value from <code>false</code> to <code>true</code>, links to the page require a CSRF token to be added to them, or the page will be inaccessible.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> |

| Field Name | Details |
|-------------|---|
| | <ul style="list-style-type: none"> • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged <p>This field is available in API version 38.0 and later.</p> |
| Markup | <p>Type textarea</p> <p>Properties Create, Update</p> <p>Description The Visualforce markup, HTML, Javascript, and any other Web-enabled code that defines the content of the page. This field is available in API version 30.0 and later.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The text used to identify the Visualforce page in the Setup area of Salesforce. The Label is Label. This field is available in API version 30.0 and later.</p> |
| Metadata | <p>Type mns:ApexPage</p> <p>Properties Create, Nillable, Update</p> <p>Description The Visualforce page metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. This field is available in API version 36.0 and later.</p> |
| Name | <p>Type string</p> <p>Properties Create, Filter, Group, idLookup, Sort, Update</p> <p>Description Required. Name of this Visualforce page. This field is available in API version 30.0 and later.</p> |

| Field Name | Details |
|-----------------|---|
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none">• In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer.• In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. <p>This field is available in API version 30.0 and later.</p> |

Usage

To retrieve information about a Visualforce page, create an `ApexPage` object that references it. For example code, see [SOAP Calls](#).

To edit, save, or compile Visualforce pages, use [ApexPageMember](#).

ApexPageInfo

Represents metadata about a Visualforce page. This object is available in API version 37.0 and later.

To edit, save, or compile Apex pages, use [ApexPageMember](#). To load markup for a page or other fields, use [ApexPage](#).

Supported SOAP API Calls

`describeSObjects()`, `query()`

Supported REST API HTTP Methods


Query, GET

Special Access Rules

As of Summer '20 and later, this object can only be accessed by users who can view a particular Visualforce page, and users with the View Setup and Configuration permission.

Fields

| Field | Details |
|--------------------|---|
| ApexPageId | Type reference Properties Filter, Group, Sort Description ID for the Visualforce page. |
| ApiVersion | Type double Properties Filter, Sort Description The API version for the page. Every page has an API version specified at creation. If the API version is less than 15.0 and <code>ApiVersion</code> is not specified, <code>ApiVersion</code> defaults to 15.0. |
| Description | Type textarea Properties Filter, Nillable, Sort Description Description of the Visualforce page. |
| DurableId | Type string Properties Filter, Group, Nillable, Sort Description For internal use only. |
| IsAvailableInTouch | Type boolean Properties Defaulted on create, Filter, Group, Sort |

| Field | Details |
|------------------------------|--|
| | <p>Description</p> <p>This field indicates whether Visualforce tabs associated with the Visualforce page can be used in the Salesforce app (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| <code>IsShowHeader</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The <code>showHeader</code> value for the Visualforce page. This will be “unknown” if the Visualforce page uses an expression to compute <code>showHeader</code>. The default setting is <code>true</code>.</p> |
| <code>MasterLabel</code> | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The text used to identify the Visualforce page in the Setup area of Salesforce.</p> |
| <code>Name</code> | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>Developer name of the Visualforce page.</p> |
| <code>NamespacePrefix</code> | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> In Developer Edition orgs, the namespace prefix is set to the namespace prefix of the org for all objects that support it. <p> Note: If an object is in an installed managed package, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer.</p> |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> In non-Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. Objects outside of an installed managed package don't have a namespace prefix. |

ApexPageInfo

Usage

To retrieve labels and names for Visualforce pages, query the object that references it. For sample code, see [SOAP Calls](#).

ApexPageMember

Represents the working copy of a Visualforce page for editing, saving, or compiling in a MetadataContainer.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

As of Spring '20 and later, to access `ApexPageMember`, users must have both the View All Data and Customize Application permissions.

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|------------|---|
| Body | <p>Type string</p> <p>Properties Create, Update</p> <p>Description The data for the Visualforce page. The <code>Body</code> field is the only field you can <code>update()</code> or <code>PATCH</code>.</p> |
| Content | <p>Type string</p> |

| Field Name | Details |
|-----------------|---|
| | <p>Properties None</p> <p>Description A string representation of ApexPageMetadata that lists the version, status, and packaged versions of the corresponding Visualforce page.</p> |
| ContentEntityId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description A reference to a Visualforce page. There can be only one ContentEntityId per ApexPageMember, otherwise, an error is reported. This field is required if FullName is not specified.</p> |
| FullName | <p>Type string</p> <p>Properties Group, Nillable</p> <p>Description The full name of the associated object in the Metadata API. Use to avoid race conditions on create, before you have IDs. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. This field is required if ContentEntityId is not specified.</p> |
| LastSyncDate | <p>Type dateTime</p> <p>Properties Filter, Sort</p> <p>Description The date that this ApexPageMember Body was replicated from the underlying entity. When you deploy a MetadataContainer, this value is compared with the LastModifiedDate of the underlying Visualforce page. If LastSyncDate is older than LastModifiedDate, the deployment fails with an error.</p> |
| Metadata | <p>Type ApexPageMetadata</p> |

| Field Name | Details |
|---------------------|--|
| | <p>Properties None</p> <p>Description An object that describes the version, status, and packaged versions of the corresponding Visualforce page. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| MetadataContainerId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description A reference to a MetadataContainer or ContainerAsyncRequest object. As part of a successful deployment, this field is reset from the ID of the deployed MetadataContainer to the ID of the corresponding ContainerAsyncRequest object. This field is required.</p> |

Usage

To edit, save, or compile a Visualforce page, create an ApexPageMember object that references it. To create a Visualforce page, use the REST API or the Metadata API.



Note: Once an ApexPageMember is successfully deployed in a [MetadataContainer](#), the `MetadataContainerId` is changed to the ID of the [ContainerAsyncRequest](#), and the ApexPageMember can't be modified or reused.

Visualforce pages and components are often dependent on each other for functionality. To successfully save and compile a group of related source files, put the corresponding ApexPageMember and ApexComponentMember objects in a single MetadataContainer object. Use ContainerAsyncRequest to send the MetadataContainer to the application server.

Each ApexPageMember object can only refer to a single MetadataContainer object. Multiple ApexPageMember objects can refer to the same MetadataContainer object.

SEE ALSO:


[REST API Developer Guide](#)

[Metadata API Developer Guide](#)

ApexResult

A complex type that represents the result of Apex code executed as part of an ApexExecutionOverlayAction, returned in an ApexExecutionOverlayResult. Available from API version 28.0 or later.

Fields

| Field | Details |
|----------------------------------|---|
| <code>apexError</code> | <p>Type string</p> <p>Description The error text returned if the execution was unsuccessful.</p> |
| <code>apexExecutionResult</code> | <p>Type <code>ExecuteAnonymousResult</code></p> <p>Description The structured result returned from a successful execution. ExecuteAnonymousResult includes the following fields:</p> <ul style="list-style-type: none"> • <code>column</code> • <code>compileProblem</code> • <code>compiled</code> • <code>exceptionMessage</code> • <code>exceptionStackTrace</code> • <code>line</code> • <code>success</code> <p> Note: <code>ExecuteAnonymousResult</code> is outside the current execution context and does not provide access to variables in the heap.</p> |

Usage

Overlay Apex on checkpoints to capture structured debugging information. If your SOQL query may return more than one record when dealing with complex types, select only one row. For example, you can use a `LIMIT=1` clause in your SOQL query, or you can list rows for the user and have them select the row to inspect.

ApexTestQueueItem

Represents a single Apex class in the Apex job queue. Available in API version 30.0 and later.

Supported SOAP API Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH

Fields

| Field Name | Details |
|----------------|---|
| ApexClassId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The Apex class whose tests are to be executed. This field can't be updated.</p> |
| Status | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The status of the test. Valid values are:</p> <ul style="list-style-type: none"> Queued Processing Aborted Completed Failed Preparing Holding <p>To abort a class that is in the Apex job queue, perform an update operation on the <code>ApexTestQueueItem</code> object and set its <code>Status</code> field to <code>Aborted</code>.</p> |
| ExtendedStatus | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The pass rate of the test run. For example: "(4/6)". This means that four out of a total of six tests passed. If the class fails to execute, this field contains the cause of the failure.</p> |
| ParentJobId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field Name | Details |
|------------------------|---|
| | <p>Description</p> <p>Read-only. Points to the <code>AsyncApexJob</code> that represents the entire test run.</p> <p>If you insert multiple Apex test queue items in a single bulk operation, the queue items will share the same parent job. This means that a test run can consist of the execution of the tests of several classes if all the test queue items are inserted in the same bulk operation.</p> |
| ShouldSkipCodeCoverage | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description</p> <p>Indicates whether to opt out of collecting code coverage information during Apex test runs. Available in API version 43.0 and later.</p> |
| TestRunResultID | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The ID of the associated ApexTestRunResult object. Available in API version 37.0 and later.</p> |

Usage

Insert an `ApexTestQueueItem` object to place its corresponding Apex class in the Apex job queue for execution. The Apex job executes the test methods in the class.

The example `RunTestListener.java` class below subscribes to the `TestResult` system topic and prints out the test results using `ApexTestQueueItem` and `ApexTestResult`. The example assumes the following:

- You have already set up a Java client application for Streaming API. This example uses the `org.cometd.client.BayeuxClient` created in the Java Client code example in the [Streaming API Developer Guide](#).
- You have a logged in `com.sforce.soap.tooling.SoapConnection`. For examples, see the [SOAP API Developer Guide](#).



Note: The `RunTestListener.java` class must be instantiated after the Streaming API handshake. For example:

```
SoapConnection toolingConn; //Already set and logged in
BayeuxClient client; //Already set and logged in

//Listen on the handshake event
boolean handshaken = client.waitFor(10 * 1000, BayeuxClient.State.CONNECTED);
if (!handshaken) {
```

```

        System.out.println("Failed to handshake: " + client);
        System.exit(1);
    }
    final RunTestListener = null;
    client.getChannel(Channel.META_SUBSCRIBE).addListener(
        new ClientSessionChannel.MessageListener() {
            public void onMessage(ClientSessionChannel channel, Message message) {
                boolean success = message.isSuccessful();
                if (success) {
                    //Replace with your own classes and suites
                    String apexTestClassId1 = "01pD00000007M0CIAU";
                    String apexTestClassId2 = "01pD00000007NqtIAE";
                    String apexTestSuiteId1 = "05FD00000004CDBMA2";
                    String apexTestClassName1 = "Test_MyClass";
                    String apexTestSuiteName1 = "TestSuite_MySuite";
                    listener.runTests(new String[]{apexTestClassId1, apexTestClassId2},
                        new String[]{apexTestSuiteId1}, 1, new String[]{apexTestClassName1},
                        new String[]{apexTestSuiteName1});
                }
            }
        }
    );
    //This will subscribe to the TestRun system topic
    listener = new RunTestListener(client, toolingConn);

```

```

import java.util.HashMap;
import org.apache.commons.lang3.StringUtils;
import org.cometd.bayeux.Message;
import org.cometd.bayeux.client.ClientSessionChannel;
import org.cometd.bayeux.client.ClientSessionChannel.MessageListener;
import org.cometd.client.BayeuxClient;

import com.sforce.soap.tooling.ApexTestQueueItem;
import com.sforce.soap.tooling.ApexTestResult;
import com.sforce.soap.tooling.QueryResult;
import com.sforce.soap.tooling.SObject;
import com.sforce.soap.tooling.SoapConnection;
import com.sforce.soap.tooling.TestLevel;
import com.sforce.ws.ConnectionException;

public class RunTestListener {
    private static final String CHANNEL = "/systemTopic/TestResult";
    private SoapConnection conn;

    public RunTestListener(BayeuxClient client, SoapConnection conn) {
        this.conn = conn;
        System.out.println("Subscribing for channel: " + CHANNEL);
        client.getChannel(CHANNEL).subscribe(new MessageListener() {

```

```

    @Override
    public void onMessage(ClientSessionChannel channel, Message message) {
        HashMap data = (HashMap) message.getData();
        HashMap subject = (HashMap) data.get("subject");
        String id = (String) subject.get("Id");
        System.out.println("\nAysncApexJob " + id);
        getTestQueueItems(id);
    }
});
}

public void runTests(String[] apexTestClassIds, String[] apexTestSuiteIds,
    Integer maxFailedTests, String[] apexTestClassNames, String[] apexTestSuiteNames) {

    // All parameters are required

    if (apexTestClassIds == null && apexTestSuiteIds == null
        && apexTestClassNames == null && apexTestSuiteNames == null) {
        System.out.println("No tests to run");
        return;
    }
    String classIds = StringUtils.join(apexTestClassIds, ", ");
    String suiteIds = StringUtils.join(apexTestSuiteIds, ", ");
    String classNames = StringUtils.join(apexTestClassNames, ", ");
    String suiteNames = StringUtils.join(apexTestSuiteNames, ", ");

    String tests = null;
    Boolean skipCodeCover = false;

    try {
        System.out.println("Running async test run");
        conn.runTestsAsynchronous(classIds, suiteIds, maxFailedTests,
            TestLevel.RunSpecifiedTests, classNames, suiteNames, tests, skipCodeCover);
    } catch (ConnectionException e) {
        e.printStackTrace();
    }
}

public void createAndRunTestsNode(String apexTestClassName,
    String apexTestClassId, String[] apexTestMethods) {

    //Currently, the array size of TestNode objects must be 1

    //Provide a non-null class name or a non-null class ID
    if (apexTestClassName != null && apexTestClassId != null) {
        System.out.println("Specify a class name OR a class ID");
        return;
    } else if (apexTestClassName == null && apexTestClassId == null) {
        System.out.println("No tests to run");
        return;
    }

    TestsNode thisTestsNode = new TestsNode();
    thisTestsNode.setClassName(apexTestClassName);

```

```

thisTestsNode.setClassId(apexTestClassId);
thisTestsNode.setTestMethods(apexTestMethods);
TestsNode[] tests = new TestsNode[] { thisTestsNode };

try {
    System.out.println("Running async test run");
    conn.runTestsAsynchronous(null, null, -1, null, null, null, tests);
} catch (ConnectionException e) {
    e.printStackTrace();
}
}

private void getTestQueueItems(String asyncApexJobId) {
    try {
        QueryResult res = conn
            .query("SELECT Id, Status, ApexClassId FROM ApexTestQueueItem
                WHERE ParentJobId = '" + asyncApexJobId + "'");
        if (res.getSize() > 0) {
            for (SObject o : res.getRecords()) {
                ApexTestQueueItem atqi = (ApexTestQueueItem) o;
                System.out.println("\tApexTestQueueItem - "+atqi.getStatus());
                if (atqi.getStatus().equals("Completed")) {
                    getApexTestResults(atqi.getId());
                }
            }
        } else {
            System.out.println("No queued items for " + asyncApexJobId);
        }
    } catch (ConnectionException e) {
        e.printStackTrace();
    }
}

private void getApexTestResults(String apexTestQueueItemId) {
    try {
        QueryResult res = conn
            .query("SELECT StackTrace,Message, AsyncApexJobId,MethodName, Outcome,ApexClassId

                FROM ApexTestResult WHERE QueueItemId = '" + apexTestQueueItemId + "'");
        if (res.getSize() > 0) {
            for (SObject o : res.getRecords()) {
                ApexTestResult atr = (ApexTestResult) o;
                System.out.println("\tTest result for "
                    + atr.getApexClassId() + "." + atr.getMethodName());
                String msg = atr.getOutcome().equals("Fail") ? " - "
                    + atr.getMessage() + " " + atr.getStackTrace() : "";
                System.out.println("\t\tTest " + atr.getOutcome() + msg);
            }
        } else {
            System.out.println("No Test Results for " + apexTestQueueItemId);
        }
    } catch (ConnectionException e) {
        e.printStackTrace();
    }
}

```

```
}  
}
```

ApexTestResult

Represents the result of an Apex test method execution. Available from API version 30.0 or later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Supported REST API HTTP Methods

Query, GET

Fields

| Field Name | Details |
|----------------------------------|---|
| <code>ApexClassId</code> | Type reference Properties Create, Filter, Group, Sort, Update Description The Apex class whose test methods were executed. |
| <code>ApexLogId</code> | Type reference Properties Create, Filter, Group, Nillable, Sort, Update Description Points to the <code>ApexLog</code> for this test method execution if debug logging is enabled; otherwise, <code>null</code> . |
| <code>ApexTestRunResultId</code> | Type reference Properties Create, Filter, Group, Nillable, Sort, Update Description The ID of the ApexTestRunResult that represents the entire test run. |

| Field Name | Details |
|----------------|---|
| AsyncApexJobId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Points to the <code>AsyncApexJob</code> that represents the entire test run. This field points to the same object as <code>ApexTestQueueItem.ParentJobId</code>.</p> |
| Message | <p>Type string</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The exception error message if a test failure occurs; otherwise, <code>null</code>.</p> |
| MethodName | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The name of the test method.</p> |
| Outcome | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The result of the test. Valid values are:</p> <ul style="list-style-type: none">• Pass• Fail• CompileFail• Skip |
| QueueItemId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> |

| Field Name | Details |
|---------------|---|
| | Description Points to the ApexTestQueueItem which is the class that this test method is part of. |
| RunTime | Type int Properties Create, Filter, Group, Nillable, Sort, Update Description The time it took the test method to run, in seconds. |
| StackTrace | Type string Properties Create, Filter, Nillable, Sort, Update Description The Apex stack trace if the test failed; otherwise, null. |
| TestTimestamp | Type dateTime Properties Create, Filter, Sort, Update Description The start time of the test method. |

Usage

You can query the fields of the ApexTestResult record that corresponds to a test method executed as part of an Apex class execution. Each test method execution is represented by a single ApexTestResult record. For example, if an Apex test class contains six test methods, six ApexTestResult records are created. These records are in addition to the ApexTestQueueItem record that represents the Apex class. Each ApexTestResult record has an associated ApexTestResultLimits record, which captures the Apex limits used during execution of the test method.

For example code, see [ApexTestQueueItem](#).

ApexTestResultLimits

Captures the Apex test limits used for a particular test method execution. An instance of this object is associated with each ApexTestResult object. Available from API version 37.0 or later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Supported REST API HTTP Methods

Query, GET

Fields

| Field Name | Details |
|------------------|---|
| ApexTestResultId | Type reference Properties Create, Filter, Group, Sort Description The ID of the associated ApexTestResult object. |
| AsyncCalls | Type int Properties Create, Filter, Group, Sort, Update Description The number of asynchronous calls made during the test run. |
| Callouts | Type int Properties Create, Filter, Group, Sort, Update Description The number of callouts made during the test run. |
| Cpu | Type int Properties Create, Filter, Group, Sort, Update Description The amount of CPU used during the test run, in milliseconds. |
| Dml | Type int |

| Field Name | Details |
|-----------------|---|
| | Properties Create, Filter, Group, Sort, Update Description The number of DML statements made during the test run. |
| DmlRows | Type int Properties Create, Filter, Group, Sort, Update Description The number of rows accessed by DML statements during the test run. |
| Email | Type int Properties Create, Filter, Group, Sort, Update Description The number of email invocations made during the test run. |
| LimitContext | Type string Properties Create, Filter, Group, Nillable, Sort, Update Description Indicates whether the test run was synchronous or asynchronous. |
| LimitExceptions | Type string Properties Create, Filter, Group, Nillable, Sort, Update Description Indicates whether your org has any limits that differ from the default limits. |
| MobilePush | Type int Properties Create, Filter, Group, Sort, Update Description The number of mobile push calls made during the test run. |

| Field Name | Details |
|------------|--|
| QueryRows | Type int Properties Create, Filter, Group, Sort, Update Description The number of rows queried during the test run. |
| Soql | Type int Properties Create, Filter, Group, Sort, Update Description The number of SOQL queries made during the test run. |
| Sosl | Type int Properties Create, Filter, Group, Sort, Update Description The number of SOSL queries made during the test run. |

Usage

The `ApexTestResultLimits` object is populated for each test method execution, and it captures the limits used between the `Test.startTest()` and `Test.stopTest()` methods. If `startTest()` and `stopTest()` aren't called, limits usage is not captured. Note the following:

- The associated test method must be run asynchronously.
- Limits for asynchronous Apex operations (batch, scheduled, future, and queueable) that are called within test methods are not captured.
- Limits are captured only for the default namespace.

ApexTestRunResult

Contains summary information about all the test methods that were run in a particular Apex job. Available from API version 37.0 or later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Supported REST API HTTP Methods

Query, GET

Fields

| Field Name | Details |
|------------------|---|
| AsyncApexJobId | Type reference Properties Create, Filter, Group, Nillable, Sort, Update Description The parent Apex job ID for the result. |
| ClassesCompleted | Type int Properties Create, Filter, Group, Nillable, Sort, Update Description The total number of classes executed during the test run. |
| ClassesEnqueued | Type int Properties Create, Filter, Group, Sort, Update Description The total number of classes enqueued during the test run. |
| EndTime | Type dateTime Properties Create, Filter, Nillable, Sort, Update Description The time at which the test run ended. |
| IsAllTests | Type boolean Properties Create, Filter, Group, Sort, Update Description Indicates whether all Apex test classes were run. |

| Field Name | Details |
|------------------|--|
| JobName | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Reserved for future use.</p> |
| MethodsCompleted | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The total number of methods completed during the test run. This value is updated after each class is run.</p> |
| MethodsEnqueued | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The total number of methods enqueued for the test run. This value is initialized before the test runs.</p> |
| MethodsFailed | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The total number of methods that failed during this test run. This value is updated after each class is run.</p> |
| Source | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The source of the test run, such as the Developer Console.</p> |
| StartTime | <p>Type dateTime</p> |

| Field Name | Details |
|------------|---|
| | Properties Create, Filter, Sort, Update Description The time at which the test run started. |
| Status | Type picklist Properties Create, Filter, Group, Sort, Update Description The status of the test run. Can be one of these values: <ul style="list-style-type: none"> • Queued • Processing • Aborted • Completed • Failed |
| TestTime | Type int Properties Create, Filter, Group, Nillable, Sort, Update Description The time it took the test to run, in seconds. |
| UserId | Type reference Properties Create, Filter, Group, Nillable, Sort, Update Description The user who ran the test run. |

ApexTestSuite

Represents a suite of Apex classes to include in a test run. A TestSuiteMembership object associates each class with the suite. Available in the `ens` namespace in Tooling API version 36.0 and later. Also, available in the `mns` namespace in Tooling API version 38.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields (ens Namespace)

| Field Name | Description |
|---------------|--|
| TestSuiteName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Unique, Update</p> <p>Description</p> <p>The name of the Apex test suite. This label appears in the user interface.</p> <p>This value is case-sensitive and must be unique.</p> |

Fields (mns Namespace)

| Field Name | Field Type | Description |
|---------------|------------|--|
| testClassName | string[] | A list of Apex test classes, specified by name, to include in this test suite. |

Usage

Insert a TestSuiteMembership object using an API call to associate an Apex class with an ApexTestSuite object. (ApexTestSuite and TestSuiteMembership aren't editable through Apex DML.) To remove the class from the test suite, delete the TestSuiteMembership object. If you delete an Apex test class or test suite, all TestSuiteMembership objects that contain that class or suite are deleted.

The following SOQL query returns the membership object that relates this Apex class to this test suite.

```
SELECT Id FROM TestSuiteMembership WHERE ApexClassId = '01pD0000000Fhy9IAC'
AND ApexTestSuiteId = '05FD00000004CDBMA2'
```

ApexTrigger

Represents the saved copy of an Apex trigger. ApexTrigger uses the cached version of the class unless one is unavailable. Available from API version 28.0 or later.

To edit, save, or compile Apex triggers, use [ApexTriggerMember](#).

Supported SOAP API Calls

create(), delete(), describeSObjects(), query(), retrieve(), update(), upsert()


Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|--------------------|--|
| ApiVersion | <p>Type double</p> <p>Properties Create, Filter, Sort, Update</p> <p>Description The API version for this trigger. Every trigger has an API version specified at creation.</p> |
| Body | <p>Type string</p> <p>Properties Create, Nillable, Update</p> <p>Description The Apex trigger definition. Limit: 1 million characters.</p> |
| BodyCrc | <p>Type double</p> <p>Properties Create, Defaulted on create, Filter, Nillable, Sort, Update</p> <p>Description The CRC (cyclic redundancy check) of the class or trigger file.</p> |
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The Id of the EntityDefinition object associated with this object.</p> |
| IsValid | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether any dependent metadata has changed since the trigger was last compiled (<code>true</code>) or not (<code>false</code>).</p> |

| Field Name | Details |
|-----------------------|---|
| LengthWithoutComments | <p>Type int</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Length of the trigger without comments.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Metadata | <p>Type ApexTriggerMetadata</p> <p>Properties None</p> <p>Description An object that describes the version, status, and packaged versions of the corresponding Apex trigger. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Status | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The status of the Apex trigger. The following string values are valid:</p> <ul style="list-style-type: none"> • <code>Active</code>—The trigger is active. |

| Field Name | Details |
|---------------------------------|--|
| | <ul style="list-style-type: none"> <code>Inactive</code>—The trigger is inactive, but not deleted. <code>Deleted</code>—The trigger is marked for deletion. This status is useful for managed packages, because it allows a class to be deleted when a managed package is updated. <p> Note: Apex triggers cannot be deactivated using Tooling API. You can deactivate Apex triggers using Metadata API. Consider using custom metadata records and include logic in your trigger to bypass trigger configuration logic. For more information, see the Metadata API Developer Guide.</p> |
| <code>UsageAfterDelete</code> | <p>Type boolean</p> <p>Properties Create, Filter, Update</p> <p>Description Specifies whether the trigger is an after delete trigger (<code>true</code>) or not (<code>false</code>).</p> |
| <code>UsageAfterInsert</code> | <p>Type boolean</p> <p>Properties Create, Filter, Update</p> <p>Description Specifies whether the trigger is an after insert trigger (<code>true</code>) or not (<code>false</code>).</p> |
| <code>UsageAfterUndelete</code> | <p>Type boolean</p> <p>Properties Create, Filter, Update</p> <p>Description Specifies whether the trigger is an after undelete trigger (<code>true</code>) or not (<code>false</code>).</p> |
| <code>UsageAfterUpdate</code> | <p>Type boolean</p> <p>Properties Create, Filter, Update</p> <p>Description Specifies whether the trigger is an after update trigger (<code>true</code>) or not (<code>false</code>).</p> |
| <code>UsageBeforeDelete</code> | <p>Type boolean</p> <p>Properties Create, Filter, Update</p> <p>Description Specifies whether the trigger is a before delete trigger (<code>true</code>) or not (<code>false</code>).</p> |

| Field Name | Details |
|-------------------|--|
| UsageBeforeInsert | Type boolean Properties Create, Filter, Update Description Specifies whether the trigger is an before insert trigger (<code>true</code>) or not (<code>false</code>). |
| UsageBeforeUpdate | Type boolean Properties Create, Filter, Update Description Specifies whether the trigger is an before update trigger (<code>true</code>) or not (<code>false</code>). |
| UsageIsBulk | Type boolean Properties Create, Filter, Update Description Specifies whether the trigger is defined as a bulk trigger (<code>true</code>) or not (<code>false</code>). |

Usage

To retrieve information about an Apex trigger, create an `ApexTrigger` object that references it. For example code, see [SOAP Calls](#).

To edit, save, or compile Apex triggers, use [ApexTriggerMember](#).

Although Apex classes and triggers have the Create and Update field properties, a runtime exception occurs if you try to create, update, or delete them using the API. Instead, use the Salesforce Extensions for Visual Studio Code or the Ant Migration Tool to create or update Apex classes or triggers. Apex classes and triggers can't be created, edited, or deleted in a production org. See [Deploying Apex](#).

ApexTriggerMember

Represents the working copy of an Apex trigger for editing, saving, or compiling in a `MetadataContainer`.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Special Access Rules

As of the Spring '20 release, to access ApexTriggerMember you must have both the View All Data and the Author Apex user permissions.

Fields

| Field Name | Details |
|-----------------|--|
| Body | <p>Type string</p> <p>Properties Create, Update</p> <p>Description The data for the Apex trigger. The Body field is the only field you can <code>update()</code> or <code>PATCH</code>.</p> |
| Content | <p>Type string</p> <p>Properties None</p> <p>Description A string representation of ApexTriggerMetadata that lists the version, status, and packaged versions of the corresponding Apex trigger.</p> |
| ContentEntityId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description A reference to an Apex trigger. There can be only one ContentEntityId per ApexTriggerMember, otherwise, an error is reported. This field is required if FullName is not specified.</p> |
| FullName | <p>Type string</p> <p>Properties Group, Nillable</p> <p>Description The full name of the associated object in the Metadata API. Use to avoid race conditions on create, before you have IDs.</p> |

| Field Name | Details |
|----------------------------------|--|
| | <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> <p>This field is required if <code>ContentEntityId</code> is not specified.</p> |
| <code>LastSyncDate</code> | <p>Type dateTime</p> <p>Properties Filter, Sort</p> <p>Description The date that this ApexTriggerMember <code>Body</code> was replicated from the underlying entity.</p> <p>When you deploy a MetadataContainer, this value is compared with the <code>LastModifiedDate</code> of the underlying Apex trigger. If <code>LastSyncDate</code> is older than <code>LastModifiedDate</code>, the deployment fails with an error.</p> |
| <code>Metadata</code> | <p>Type ApexTriggerMetadata</p> <p>Properties None</p> <p>Description An object that describes the version, status, and packaged versions of the corresponding Apex trigger.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| <code>MetadataContainerId</code> | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description A reference to a MetadataContainer or ContainerAsyncRequest object.</p> <p>As part of a successful deployment, this field is reset from the ID of the deployed MetadataContainer to the ID of the corresponding ContainerAsyncRequest object.</p> <p>This field is required.</p> |
| <code>SymbolTable</code> | <p>Type SymbolTable</p> <p>Properties Nillable</p> |

| Field Name | Details |
|------------|---|
| | <p>Description</p> <p>A complex type that represents all user-defined tokens in the <code>Body</code> of an <code>ApexClass</code>, <code>ApexClassMember</code>, or <code>ApexTriggerMember</code> and their associated line and column locations within the <code>Body</code>.</p> <p>This field is null if the symbol table cannot be created. A symbol table can't be created if the content referenced by the <code>ContentEntityId</code> field doesn't use a symbol table. Compiler errors for the last deployment of the MetadataContainer in the <code>MetadataContainerId</code> field also prevent a symbol table from being created.</p> |

Usage

To edit, save, or compile an Apex trigger, create an `ApexTriggerMember` object that references it. To create a trigger, use REST API or the Metadata API.



Note: Once an `ApexTriggerMember` is successfully deployed in a [MetadataContainer](#), the `MetadataContainerId` is changed to the ID of the [ContainerAsyncRequest](#), and the `ApexTriggerMember` can't be modified or reused.

Apex triggers and classes are often dependent on each other for functionality. For example, a method in one class can call a method in another class. If source file A is dependent on modified source file B and you try to save and compile source file A before you've saved the changes to source file B, the compiler throws an error. To successfully save and compile a group of related source files, put the corresponding `ApexTriggerMember` and `ApexClassMember` objects in a single `MetadataContainer` object. Use `ContainerAsyncRequest` to send the `MetadataContainer` to the application server.

Each `ApexTriggerMember` object can only refer to a single `MetadataContainer` object. Multiple `ApexTriggerMember` objects can refer to the same `MetadataContainer` object.

SEE ALSO:

[REST API Developer Guide](#)

[Metadata API Developer Guide](#)

AssignmentRule

Don't use this object.

This object is exposed in API version 35.0, however `AssignmentRule` is reserved for future use.

AuraDefinition

Represents an Aura component definition, such as component markup, a client-side controller, or an event. Available in API version 32.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|------------------------|--|
| AuraDefinitionBundleId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The ID of the bundle containing the definition. A bundle contains a Lightning definition and all its related resources.</p> |
| DefType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The definition type. Valid values are:</p> <ul style="list-style-type: none"> • APPLICATION — Lightning Aura Components app • CONTROLLER — client-side controller • COMPONENT — component markup • EVENT — event definition • HELPER — client-side helper • INTERFACE — interface definition • RENDERER — client-side renderer • STYLE — style (CSS) resource • PROVIDER — reserved for future use • MODEL — deprecated, do not use • TESTSUITE — reserved for future use • DOCUMENTATION — documentation markup • TOKENS — tokens collection • DESIGN — design definition • SVG — SVG graphic resource • MODULE — reserved for future use |
| Format | <p>Type picklist</p> |

| Field Name | Details |
|-----------------|---|
| | <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The format of the definition. Valid values are:</p> <ul style="list-style-type: none"> • XML for component markup • JS for JavaScript code • CSS for styles • TEMPLATE_CSS reserved for future use • SVG for an SVG graphic |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged <p>This field is available in API version 38.0 and later.</p> |
| Source | <p>Type textarea</p> <p>Properties Create, Update</p> <p>Description The contents of the definition. This is all the markup or code for the definition.</p> |

Usage

For more information, see the [Lightning Aura Components Developer Guide](#).

AuraDefinitionBundle

Represents a Lightning Aura component definition bundle, such as a component or application bundle. A bundle contains a Lightning Aura component definition and all its related resources. Available in API version 32.0 and later.

Supported SOAP API Calls



`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|---------------|--|
| ApiVersion | Type double Properties Filter, Sort Description The API version for this bundle. Every bundle has an API version specified at creation. |
| Description | Type textarea Properties Filter, Group, Sort Description The text description of the bundle. Maximum size of 255 characters. |
| DeveloperName | Type string Properties Filter, Group, Sort Description The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated but you can supply your own value if you create the record using the API. |

| Field Name | Details |
|------------------------------|---|
| | <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance slows down while Salesforce generates one for each record.</p> <p> Note: Only users with View <code>DeveloperName</code> OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| <code>FullName</code> | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The unique name used as the <code>AuraDefinitionBundle</code> identifier for API access. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| <code>Language</code> | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the <code>MasterLabel</code>.</p> |
| <code>ManageableState</code> | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> • <code>installedEditable</code> • <code>released</code> • <code>unmanaged</code> |

| Field Name | Details |
|-----------------|---|
| | This field is available in API version 38.0 and later. |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Master label for the Lightning bundle. This internal label doesn't get translated.</p> |
| Metadata | <p>Type mns:AuraDefinitionBundle</p> <p>Properties Create, Nillable, Update</p> <p>Description The AuraDefinitionBundle metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation. The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |

Usage

For more information, see the [Lightning Aura Components Developer Guide](#).

AutoResponseRule

Specifies whether the autoresponse rule is active (`true`).

Available in API version 35.0 and later.

Supported SOAP API Calls

`query()`

Supported REST API HTTP Methods

Query, GET

Fields

| Field Name | Details |
|--------------------|---|
| Active | Type boolean Properties Defaulted on create Filter, Group, Sort Description If <code>true</code> , the autoresponse rule is active. |
| EntityDefinitionId | Type string Properties Filter, Group, Sort Description Represents the object associated with this autoresponse rule. |
| Name | Type string Properties Filter, Group, Nillable, Sort Description Represents the name of the autoresponse rule. |

Usage

Use this object to query whether an autoresponse rule is active.

```
SELECT Name, Active
FROM AutoResponseRule
```

More information about the autoresponse rule is available by querying the metadata type `AutoResponseRules` or `AutoResponse` in the metadata namespace (`mns`).

BrandingSet

Represents a set of branding properties for an Experience Builder site, as defined in the Theme panel in Experience Builder. This object is available in API version 40.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|---------------|--|
| Description | Type textarea Properties Filter, Nillable, Sort Description A description of the branding set. |
| DeveloperName | Type string Properties Filter, Group, Sort Description Unique name of the branding set. |
| FullName | Type string Properties Create, Group, Nillable |

| Field | Details |
|-----------------|--|
| | <p>Description</p> <p>The full name of the branding set in Metadata API. The full name can include a namespace prefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The language of the branding set.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • da—Danish • de—German • en_US—English • es—Spanish • es_MX—Spanish (Mexico) • fi—Finnish • fr—French • it—Italian • ja—Japanese • ko—Korean • nl_NL—Dutch • no—Norwegian • pt_BR—Portuguese (Brazil) • ru—Russian • sv—Swedish • th—Thai • zh_CN—Chinese (Simplified) • zh_TW—Chinese (Traditional) |
| ManageableState | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The manageable state of the branding set that is contained in a package.</p> |

| Field | Details |
|-----------------|--|
| | <p>Possible values are:</p> <ul style="list-style-type: none"> • <code>beta</code>—Managed-Beta • <code>deleted</code>—Managed-Proposed-Deleted • <code>deprecated</code>—Managed-Proposed-Deprecated • <code>deprecatedEditable</code>—SecondGen-Installed-Deprecated • <code>installed</code>—Managed-Installed • <code>installedEditable</code>—SecondGen-Installed-Editable • <code>released</code>—Managed-Released • <code>unmanaged</code>—Unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The user interface name of the branding set.</p> |
| Metadata | <p>Type BrandingSet</p> <p>Properties Create, Nillable, Update</p> <p>Description The branding set's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This |

| Field | Details |
|-------|--|
| | <p>field's value is the namespace prefix of the Developer Edition org of the package developer.</p> <ul style="list-style-type: none"> In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |
| Type | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The type of branding set.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> <code>b2b:branding-b2b</code> <code>b2c-lite-storefront:branding</code> <code>citizen:branding-citizen</code> <code>cpt:branding-cpt</code> <code>cypress:branding-cypress</code> <code>ember:branding-ember</code> <code>es-channel-menu</code> <code>helpCenter:branding-helpCenter</code> <code>identity:branding-identity</code> <code>insurance:branding-insurance</code> <code>jepson:branding-jepson</code> <code>koa:branding-koa</code> <code>kokua:branding-kokua</code> <code>login:branding-login</code> <code>login:branding-login2</code> <code>lpi:branding-lpi</code> <code>mfg:branding-mfg</code> <code>mortgage:branding-mortgage</code> <code>napili:branding-napili</code> <code>napili:branding-napili-merged</code> <code>prm:branding-prm-merged</code> <code>service:branding-service</code> <code>starter:branding-starter</code> <code>stella:branding-stella</code> <code>survey</code> <code>talon-template-byo:branding</code> |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none">• <code>webster:branding-webster</code> |

Usage

To work with branding set properties, use [BrandingSetProperty](#).

BrandingSetProperty

Represents a branding set property in the Theme panel in Experience Builder. This object is available in API version 40.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|---------------|--|
| BrandingSetId | Type reference Properties Create, Filter, Group, Sort Description The ID of the BrandingSet . |
| PropertyName | Type string Properties Create, Filter, Group, Sort, Update Description The name of the branding set property, such as <code>TextColor</code> . |
| PropertyValue | Type textarea Properties Create, Nillable, Update |

| Field | Details |
|-------|---|
| | Description The value of the branding set property, such as #333. |

BriefcaseDefinition

Represents a briefcase definition. A briefcase makes selected records available for users and groups to view when they're offline in the Salesforce Field Service mobile app for iOS and Android. This object is available in API version 50.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules

This object is available in orgs that have Briefcase Builder and Field service enabled.

Fields

| Field | Details |
|---------------|---|
| Description | Type textarea Properties Filter, Nillable, Sort Description Description of the briefcase definition. Limited to 1024 characters. |
| DeveloperName | Type string Properties Filter, Group, Sort Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With |

| Field | Details |
|----------|---|
| | <p>this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The unique name used as the briefcase definition identifier for API access. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the briefcase is available for use (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language for the briefcase. This field defaults to the user's language unless the org is multi-language enabled. Specifies the language of the labels returned.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • <code>da</code>—Danish • <code>de</code>—German • <code>en_US</code>—English • <code>es</code>—Spanish • <code>es_MX</code>—Spanish (Mexico) • <code>fi</code>—Finnish • <code>fr</code>—French • <code>it</code>—Italian • <code>ja</code>—Japanese |

| Field | Details |
|-----------------|---|
| | <ul style="list-style-type: none"> • ko—Korean • nl_NL—Dutch • no—Norwegian • pt_BR—Portuguese (Brazil) • ru—Russian • sv—Swedish • th—Thai • zh_CN—Chinese (Simplified) • zh_TW—Chinese (Traditional) |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique label for the briefcase definition. This internal label doesn't get translated.</p> |
| Metadata | <p>Type complexvalue</p> <p>Properties Create, Nillable, Update</p> <p>Description The BriefcaseDefinition metadata, which includes rules and rule filters. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more</p> |

| Field | Details |
|-----------------|---|
| | <p>than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |
| Type | <p>Type string</p> <p>Properties Reserved for future use.</p> <p>Description Reserved for future use.</p> |

BusinessProcess

Represents a business process.

This object is available in API version 33.0 and later.

Supported SOAP Calls

- `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, and `upsert()` are available in API version 33.0 and later.
- `create()` and `update()` are available in API version 36.0 and later.

Supported REST HTTP Methods

GET, PATCH, POST

Special Access Rules

Access to this object requires the View Setup and Configuration permission.

Fields

| Field | Details |
|-----------------|--|
| Description | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The business process description, limited to 255 characters.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether this business process is active (<code>true</code>) or not (<code>false</code>).</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none">• beta• deleted• deprecated• deprecatedEditable• installed• installedEditable• released• unmanaged |
| Name | <p>Type string</p> |

| Field | Details |
|-----------------|--|
| | Properties Create, Filter, Group, idLookup, Sort, Update Description The process name. |
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description A unique string to distinguish this type from any others. |

BusinessProcessDefinition

Represents information about stages in a customer lifecycle map. This object is available in API version 51.0 and later.

Supported SOAP API Calls


`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|------------------------|--|
| BusinessProcessGroupId | Type reference Properties Create, Filter, Group, Sort Description Unique identifier of the customer lifecycle map that is associated with the stage. |
| DeveloperName | Type string Properties Create, Filter, Group, Sort, Update |

| Field | Details |
|----------|---|
| | <p>Description</p> <p>Developer name of the stage.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description</p> <p>Language of the <code>MasterLabel</code>.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • <code>af</code>—Afrikaans • <code>am</code>—Amharic • <code>ar</code>—Arabic • <code>ar_AE</code>—Arabic (United Arab Emirates) • <code>ar_BH</code>—Arabic (Bahrain) • <code>ar_DZ</code>—Arabic (Algeria) • <code>ar_EG</code>—Arabic (Egypt) • <code>ar_IQ</code>—Arabic (Iraq) • <code>ar_JO</code>—Arabic (Jordan) • <code>ar_KW</code>—Arabic (Kuwait) • <code>ar_LB</code>—Arabic (Lebanon) • <code>ar_LY</code>—Arabic (Libya) • <code>ar_MA</code>—Arabic (Morocco) • <code>ar_OM</code>—Arabic (Oman) • <code>ar_QA</code>—Arabic (Qatar) • <code>ar_SA</code>—Arabic (Saudi Arabia) • <code>ar_SD</code>—Arabic (Sudan) • <code>ar_SY</code>—Arabic (Syria) • <code>ar_TN</code>—Arabic (Tunisia) • <code>ar_YE</code>—Arabic (Yemen) • <code>bg</code>—Bulgarian • <code>bn</code>—Bengali • <code>bs</code>—Bosnian • <code>ca</code>—Catalan • <code>cs</code>—Czech • <code>cy</code>—Welsh |

| Field | Details |
|-------|--|
| | <ul style="list-style-type: none"> • da—Danish • de—German • de_AT—German (Austria) • de_BE—German (Belgium) • de_CH—German (Switzerland) • de_LU—German (Luxembourg) • el—Greek • en_AU—English (Australian) • en_CA—English (Canadian) • en_GB—English (UK) • en_HK—English (Hong Kong) • en_IE—English (Ireland) • en_IN—English (Indian) • en_MY—English (Malaysian) • en_NZ—English (New Zealand) • en_PH—English (Philippines) • en_SG—English (Singapore) • en_US—English • en_ZA—English (South Africa) • es—Spanish • es_AR—Spanish (Argentina) • es_BO—Spanish (Bolivia) • es_CL—Spanish (Chile) • es_CO—Spanish (Colombia) • es_CR—Spanish (Costa Rica) • es_DO—Spanish (Dominican Republic) • es_EC—Spanish (Ecuador) • es_GT—Spanish (Guatemala) • es_HN—Spanish (Honduras) • es_MX—Spanish (Mexico) • es_NI—Spanish (Nicaragua) • es_PA—Spanish (Panama) • es_PE—Spanish (Peru) • es_PR—Spanish (Puerto Rico) • es_PY—Spanish (Paraguay) • es_SV—Spanish (El Salvador) • es_US—Spanish (United States) • es_UY—Spanish (Uruguay) |

| Field | Details |
|-------|--|
| | <ul style="list-style-type: none"> • <code>es_VE</code>—Spanish (Venezuela) • <code>et</code>—Estonian • <code>eu</code>—Basque • <code>fa</code>—Farsi • <code>fi</code>—Finnish • <code>fr</code>—French • <code>fr_BE</code>—French (Belgium) • <code>fr_CA</code>—French (Canadian) • <code>fr_CH</code>—French (Switzerland) • <code>fr_LU</code>—French (Luxembourg) • <code>ga</code>—Irish • <code>gu</code>—Gujarati • <code>hi</code>—Hindi • <code>hr</code>—Croatian • <code>hu</code>—Hungarian • <code>hy</code>—Armenian • <code>in</code>—Indonesian • <code>is</code>—Icelandic • <code>it</code>—Italian • <code>it_CH</code>—Italian (Switzerland) • <code>iw</code>—Hebrew • <code>ja</code>—Japanese • <code>ka</code>—Georgian • <code>km</code>—Khmer • <code>kn</code>—Kannada • <code>ko</code>—Korean • <code>lb</code>—Luxembourgish • <code>lt</code>—Lithuanian • <code>lv</code>—Latvian • <code>mi</code>—Te reo • <code>mk</code>—Macedonian • <code>ml</code>—Malayalam • <code>mr</code>—Marathi • <code>ms</code>—Malay • <code>mt</code>—Maltese • <code>my</code>—Burmese • <code>nl_BE</code>—Dutch (Belgium) • <code>nl_NL</code>—Dutch |

| Field | Details |
|-------------|--|
| | <ul style="list-style-type: none"> • no—Norwegian • pl—Polish • pt_BR—Portuguese (Brazil) • pt_PT—Portuguese (European) • rm—Romansh • ro—Romanian • ro_MD—Romanian (Moldova) • ru—Russian • sh—Serbian (Latin) • sh_ME—Montenegrin • sk—Slovak • sl—Slovene • sq—Albanian • sr—Serbian (Cyrillic) • sv—Swedish • sw—Swahili • ta—Tamil • te—Telugu • th—Thai • tl—Tagalog • tr—Turkish • uk—Ukrainian • ur—Urdu • vi—Vietnamese • xh—Xhosa • zh_CN—Chinese (Simplified) • zh_HK—Chinese (Hong Kong) • zh_SG—Chinese (Singapore) • zh_TW—Chinese (Traditional) • zu—Zulu |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Label of the stage.</p> |

| Field | Details |
|--------------------|---|
| ProcessDescription | Type textarea Properties Create, Nillable, Update Description Description of the stage. |
| SequenceNumber | Type int Properties Create, Filter, Group, Sort, Update Description Position of the stage in the associated customer lifecycle map. |

BusinessProcessFeedback

Represents information about the survey and the question associated with each stage in a customer lifecycle map. This object is available in API version 51.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|-------------|--|
| ActionName | Type string Properties Create, Filter, Group, Sort, Update Description Name of the survey used to gather feedback. |
| ActionParam | Type string |

| Field | Details |
|-----------------------------|--|
| | Properties Create, Filter, Group, Sort, Update Description Name of the question used to gather feedback. |
| ActionType | Type picklist Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update Description Method of collecting feedback. Possible values are: <ul style="list-style-type: none"> PHONE_CALL SURVEY |
| BusinessProcessDefinitionId | Type reference Properties Create, Filter, Group, Sort Description Unique identifier of the stage associated with the survey and question. |

BusinessProcessGroup

Represents information about the customer lifecycle maps. Customer lifecycle maps are used to track the scores provided by customers across their lifecycle using Salesforce Surveys. For example, the lifecycle stages for an Insurance business process group can include acquisition, onboarding, claims, routine services, and renewal. This object is available in API version 51.0 and later.


Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|----------------------------|--|
| CustomerSatisfactionMetric | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description Represents the question type that measures the customer's Net Promote Score or satisfaction score across their lifecycle. Possible values are:</p> <ul style="list-style-type: none"> • CSAT • NPS |
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description Description of the customer lifecycle map.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Developer name of the customer lifecycle map.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Language of the MasterLabel. Possible values are:</p> <ul style="list-style-type: none"> • af—Afrikaans • am—Amharic • ar—Arabic • ar_AE—Arabic (United Arab Emirates) |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> • ar_BH—Arabic (Bahrain) • ar_DZ—Arabic (Algeria) • ar_EG—Arabic (Egypt) • ar_IQ—Arabic (Iraq) • ar_JO—Arabic (Jordan) • ar_KW—Arabic (Kuwait) • ar_LB—Arabic (Lebanon) • ar_LY—Arabic (Libya) • ar_MA—Arabic (Morocco) • ar_OM—Arabic (Oman) • ar_QA—Arabic (Qatar) • ar_SA—Arabic (Saudi Arabia) • ar_SD—Arabic (Sudan) • ar_SY—Arabic (Syria) • ar_TN—Arabic (Tunisia) • ar_YE—Arabic (Yemen) • bg—Bulgarian • bn—Bengali • bs—Bosnian • ca—Catalan • cs—Czech • cy—Welsh • da—Danish • de—German • de_AT—German (Austria) • de_BE—German (Belgium) • de_CH—German (Switzerland) • de_LU—German (Luxembourg) • el—Greek • en_AU—English (Australian) • en_CA—English (Canadian) • en_GB—English (UK) • en_HK—English (Hong Kong) • en_IE—English (Ireland) • en_IN—English (Indian) • en_MY—English (Malaysian) • en_NZ—English (New Zealand) • en_PH—English (Philippines) |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> • en_SG—English (Singapore) • en_US—English • en_ZA—English (South Africa) • es—Spanish • es_AR—Spanish (Argentina) • es_BO—Spanish (Bolivia) • es_CL—Spanish (Chile) • es_CO—Spanish (Colombia) • es_CR—Spanish (Costa Rica) • es_DO—Spanish (Dominican Republic) • es_EC—Spanish (Ecuador) • es_GT—Spanish (Guatemala) • es_HN—Spanish (Honduras) • es_MX—Spanish (Mexico) • es_NI—Spanish (Nicaragua) • es_PA—Spanish (Panama) • es_PE—Spanish (Peru) • es_PR—Spanish (Puerto Rico) • es_PY—Spanish (Paraguay) • es_SV—Spanish (El Salvador) • es_US—Spanish (United States) • es_UY—Spanish (Uruguay) • es_VE—Spanish (Venezuela) • et—Estonian • eu—Basque • fa—Farsi • fi—Finnish • fr—French • fr_BE—French (Belgium) • fr_CA—French (Canadian) • fr_CH—French (Switzerland) • fr_LU—French (Luxembourg) • ga—Irish • gu—Gujarati • hi—Hindi • hr—Croatian • hu—Hungarian • hy—Armenian |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> • <code>in</code>—Indonesian • <code>is</code>—Icelandic • <code>it</code>—Italian • <code>it_CH</code>—Italian (Switzerland) • <code>iw</code>—Hebrew • <code>ja</code>—Japanese • <code>ka</code>—Georgian • <code>km</code>—Khmer • <code>kn</code>—Kannada • <code>ko</code>—Korean • <code>lb</code>—Luxembourgish • <code>lt</code>—Lithuanian • <code>lv</code>—Latvian • <code>mi</code>—Te reo • <code>mk</code>—Macedonian • <code>ml</code>—Malayalam • <code>mr</code>—Marathi • <code>ms</code>—Malay • <code>mt</code>—Maltese • <code>my</code>—Burmese • <code>nl_BE</code>—Dutch (Belgium) • <code>nl_NL</code>—Dutch • <code>no</code>—Norwegian • <code>pl</code>—Polish • <code>pt_BR</code>—Portuguese (Brazil) • <code>pt_PT</code>—Portuguese (European) • <code>rm</code>—Romansh • <code>ro</code>—Romanian • <code>ro_MD</code>—Romanian (Moldova) • <code>ru</code>—Russian • <code>sh</code>—Serbian (Latin) • <code>sh_ME</code>—Montenegrin • <code>sk</code>—Slovak • <code>sl</code>—Slovene • <code>sq</code>—Albanian • <code>sr</code>—Serbian (Cyrillic) • <code>sv</code>—Swedish • <code>sw</code>—Swahili |

| Field | Details |
|------------------------------|--|
| | <ul style="list-style-type: none"> • <code>ta</code>—Tamil • <code>te</code>—Telugu • <code>th</code>—Thai • <code>tl</code>—Tagalog • <code>tr</code>—Turkish • <code>uk</code>—Ukrainian • <code>ur</code>—Urdu • <code>vi</code>—Vietnamese • <code>xh</code>—Xhosa • <code>zh_CN</code>—Chinese (Simplified) • <code>zh_HK</code>—Chinese (Hong Kong) • <code>zh_SG</code>—Chinese (Singapore) • <code>zh_TW</code>—Chinese (Traditional) • <code>zu</code>—Zulu |
| <code>ManageableState</code> | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package. Possible values are:</p> <ul style="list-style-type: none"> • <code>beta</code>—Managed-Beta • <code>deleted</code>—Managed-Proposed-Deleted • <code>deprecated</code>—Managed-Proposed-Deprecated • <code>deprecatedEditable</code>—SecondGen-Installed-Deprecated • <code>installed</code>—Managed-Installed • <code>installedEditable</code>—SecondGen-Installed-Editable • <code>released</code>—Managed-Released • <code>unmanaged</code>—Unmanaged |
| <code>MasterLabel</code> | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Label of the customer lifecycle map.</p> |

| Field | Details |
|-----------------|---|
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description Namespace prefix associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. |

BusProcessFeedbackConfig

Represents information about the configuration for feedback collection. The feedback collection method triggers against pre-determined conditions on object to gather feedback. This object is available in API version 51.0 and later.

Supported SOAP API Calls


`describeSObjects()`, `query()`, `retrieve()`

Supported REST API Methods

GET, HEAD, Query

Fields

| Field | Details |
|------------|--|
| ActionName | Type string Properties Filter, Group, Sort Description Name of the method used to gather feedback. |
| ActionType | Type picklist Properties Defaulted on create, Filter, Group, Restricted picklist, Sort Description Method of collecting feedback. Possible values are: <ul style="list-style-type: none">PHONE_CALL |

| Field | Details |
|--------------------------|---|
| | <ul style="list-style-type: none"> • SURVEY |
| ConfigurationDescription | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description Describes the experience step configuration.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Unique name of the object.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| Field | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Represents the picklist field whose value triggers the feedback collection.</p> |
| FieldValue | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Represents the field value that triggers the feedback collection.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates if the feedback configuration is active (<code>true</code>) or not (<code>false</code>).</p> |
| Language | <p>Type picklist</p> |

Field**Details****Properties**

Filter, Group, Restricted picklist, Sort

Description

Language of the `MasterLabel`

Possible values are:

- `af`—Afrikaans
- `am`—Amharic
- `ar`—Arabic
- `ar_AE`—Arabic (United Arab Emirates)
- `ar_BH`—Arabic (Bahrain)
- `ar_DZ`—Arabic (Algeria)
- `ar_EG`—Arabic (Egypt)
- `ar_IQ`—Arabic (Iraq)
- `ar_JO`—Arabic (Jordan)
- `ar_KW`—Arabic (Kuwait)
- `ar_LB`—Arabic (Lebanon)
- `ar_LY`—Arabic (Libya)
- `ar_MA`—Arabic (Morocco)
- `ar_OM`—Arabic (Oman)
- `ar_QA`—Arabic (Qatar)
- `ar_SA`—Arabic (Saudi Arabia)
- `ar_SD`—Arabic (Sudan)
- `ar_SY`—Arabic (Syria)
- `ar_TN`—Arabic (Tunisia)
- `ar_YE`—Arabic (Yemen)
- `bg`—Bulgarian
- `bn`—Bengali
- `bs`—Bosnian
- `ca`—Catalan
- `cs`—Czech
- `cy`—Welsh
- `da`—Danish
- `de`—German
- `de_AT`—German (Austria)
- `de_BE`—German (Belgium)
- `de_CH`—German (Switzerland)
- `de_LU`—German (Luxembourg)
- `el`—Greek

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> • en_AU—English (Australian) • en_CA—English (Canadian) • en_GB—English (UK) • en_HK—English (Hong Kong) • en_IE—English (Ireland) • en_IN—English (Indian) • en_MY—English (Malaysian) • en_NZ—English (New Zealand) • en_PH—English (Philippines) • en_SG—English (Singapore) • en_US—English • en_ZA—English (South Africa) • es—Spanish • es_AR—Spanish (Argentina) • es_BO—Spanish (Bolivia) • es_CL—Spanish (Chile) • es_CO—Spanish (Colombia) • es_CR—Spanish (Costa Rica) • es_DO—Spanish (Dominican Republic) • es_EC—Spanish (Ecuador) • es_GT—Spanish (Guatemala) • es_HN—Spanish (Honduras) • es_MX—Spanish (Mexico) • es_NI—Spanish (Nicaragua) • es_PA—Spanish (Panama) • es_PE—Spanish (Peru) • es_PR—Spanish (Puerto Rico) • es_PY—Spanish (Paraguay) • es_SV—Spanish (El Salvador) • es_US—Spanish (United States) • es_UY—Spanish (Uruguay) • es_VE—Spanish (Venezuela) • et—Estonian • eu—Basque • fa—Farsi • fi—Finnish • fr—French • fr_BE—French (Belgium) |

| Field | Details |
|-------|--|
| | <ul style="list-style-type: none"> • <code>fr_CA</code>—French (Canadian) • <code>fr_CH</code>—French (Switzerland) • <code>fr_LU</code>—French (Luxembourg) • <code>ga</code>—Irish • <code>gu</code>—Gujarati • <code>hi</code>—Hindi • <code>hr</code>—Croatian • <code>hu</code>—Hungarian • <code>hy</code>—Armenian • <code>in</code>—Indonesian • <code>is</code>—Icelandic • <code>it</code>—Italian • <code>it_CH</code>—Italian (Switzerland) • <code>iw</code>—Hebrew • <code>ja</code>—Japanese • <code>ka</code>—Georgian • <code>km</code>—Khmer • <code>kn</code>—Kannada • <code>ko</code>—Korean • <code>lb</code>—Luxembourgish • <code>lt</code>—Lithuanian • <code>lv</code>—Latvian • <code>mi</code>—Te reo • <code>mk</code>—Macedonian • <code>ml</code>—Malayalam • <code>mr</code>—Marathi • <code>ms</code>—Malay • <code>mt</code>—Maltese • <code>my</code>—Burmese • <code>n1_BE</code>—Dutch (Belgium) • <code>n1_NL</code>—Dutch • <code>no</code>—Norwegian • <code>pl</code>—Polish • <code>pt_BR</code>—Portuguese (Brazil) • <code>pt_PT</code>—Portuguese (European) • <code>rm</code>—Romansh • <code>ro</code>—Romanian • <code>ro_MD</code>—Romanian (Moldova) |

| Field | Details |
|-----------------|--|
| | <ul style="list-style-type: none"> • ru—Russian • sh—Serbian (Latin) • sh_ME—Montenegrin • sk—Slovak • sl—Slovene • sq—Albanian • sr—Serbian (Cyrillic) • sv—Swedish • sw—Swahili • ta—Tamil • te—Telugu • th—Thai • tl—Tagalog • tr—Turkish • uk—Ukrainian • ur—Urdu • vi—Vietnamese • xh—Xhosa • zh_CN—Chinese (Simplified) • zh_HK—Chinese (Hong Kong) • zh_SG—Chinese (Singapore) • zh_TW—Chinese (Traditional) • zu—Zulu |
| ManageableState | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package. Possible values are:</p> <ul style="list-style-type: none"> • beta—Managed-Beta • deleted—Managed-Proposed-Deleted • deprecated—Managed-Proposed-Deprecated • deprecatedEditable—SecondGen-Installed-Deprecated • installed—Managed-Installed • installedEditable—SecondGen-Installed-Editable • released—Managed-Released |

| Field | Details |
|-----------------|---|
| | <ul style="list-style-type: none"> unmanaged—Unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Name of the resource, limited up to 100 characters.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Namespace prefix associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix.</p> |
| Object | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Represents the entity on which the feedback collection triggering condition depends.</p> |
| Recipient | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Represents the recipient who is contacted for the feedback collection.</p> |
| RecordType | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the record type of the entity on which the feedback collection triggering condition depends.</p> |
| TriggerAction | <p>Type picklist</p> |

| Field | Details |
|-------|---|
| | Properties Filter, Group, Restricted picklist, Sort |
| | Description Action available with the business process feedback object. Possible values are: <ul style="list-style-type: none">• Create• CreateAndUpdate• Update |

Certificate

Represents a certificate used for digital signatures that verify requests are coming from your org. Certificates are used for either authenticated single sign-on with an external website or when using your org as an identity provider. This object is available in Tooling API version 37.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP Calls


`query()`, `retrieve()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|---------------|--|
| DeveloperName | Type string |
| | Properties Filter, Group, Sort |
| | Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. |

| Field | Details |
|---------------------------------------|---|
| |  Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, Salesforce generates one for each record, which slows performance. |
| <code>ExpirationDate</code> | <p>Type date</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Read only. The date that this certificate expires and is no longer usable. For self-signed certificates, if <code>KeySize</code> is 2048 bits, the expiration date is automatically 1 year after you create the certificate. If <code>KeySize</code> is 4096 bits, the expiration date is automatically 2 years after you create the certificate. For CA-signed certificates, <code>ExpirationDate</code> is automatically updated to the signed certificate's expiration date when a signed certificate chain is uploaded. The date format is YYYY-MM-DD.</p> |
| <code>KeySize</code> | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Certificate keys can be either 2048 bits or 4096 bits. A certificate with 4096-bit keys lasts 2 years, and a certificate with 2048-bit keys lasts 1 year. Certificates with 2048-bit keys are faster than certificates with 4096-bit keys. If <code>KeySize</code> isn't specified when you create a certificate, the key size defaults to 2048 bits.</p> |
| <code>MasterLabel</code> | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. A user-friendly name for the certificate that appears in the Salesforce user interface, such as in Certificate and Key Management. Limit: 64 characters.</p> |
| <code>OptionsIsCaSigned</code> | <p>Type boolean</p> <p>Properties Filter</p> <p>Description Required. Indicates whether this certificate is signed by the issuer (true) or not (false).</p> |
| <code>OptionsIsEncryptedWithPE</code> | <p>Type boolean</p> |

| Field | Details |
|-------------------------------|---|
| | Properties Filter Description Indicates whether this certificate is encrypted with Platform Encryption. |
| OptionsIsNewEncr | Type boolean Properties Filter Description Indicates whether this certificate is encrypted with the new algorithm for certificate encryption. |
| OptionsIsPrivateKeyExportable | Type boolean Properties Filter Description Indicates whether this certificate's private key is exportable. |
| OptionsIsUnusable | Type boolean Properties Filter Description Indicates whether this certificate is waiting for import of the signed certificate chain. |

CleanDataService

Represents a data service that adds and updates data in existing records in an org.

This object is available in API version 38.0 and later.


Supported SOAP Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|---------------|---|
| Description | <p>Type textarea</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description User-friendly text that describes the data service.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description A unique name for this data service. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Provides a globally unique identifier for the data service, which prevents conflicts with other data services that have the same MasterLabel.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The language of the data service. The following values are supported:</p> <ul style="list-style-type: none"> Chinese (Simplified): zh_CN Chinese (Traditional): zh_TW Danish: da Dutch: nl_NL English: en_US Finnish: fi French: fr German: de Italian: it Japanese: ja Korean: ko Norwegian: no |

| Field | Details |
|-----------------|---|
| | <ul style="list-style-type: none"> Portuguese (Brazil): <code>pt_BR</code> Russian: <code>ru</code> Spanish: <code>es</code> Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: <code>sv</code> Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> <code>beta</code> <code>deleted</code> <code>deprecated</code> <code>deprecatedEditable</code> <code>installed</code> <code>installedEditable</code> <code>released</code> <code>unmanaged</code> |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Master label for this object. This display value is the internal label that is not translated.</p> |
| MatchEngine | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description A key that maps to the internal data service identifier.</p> |
| NamespacePrefix | <p>Type string</p> |

| Field | Details |
|-------|---|
| | Properties Filter, Group, Nillable, Sort |
| | Description The namespace prefix associated with the data service, which is assigned to the Lightning Platform AppExchange package. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The namespace helps differentiate custom objects and fields from those in use by other data services. |

CleanRule

Represents a data integration rule that controls how a data service adds and updates data for existing records in an org.

This object is available in API version 38.0 and later.

Supported SOAP Calls


`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET


Fields

| Field | Details |
|----------------------|---|
| CleanDataServiceId | Type reference |
| | Properties Create, Filter, Group, Sort |
| | Description A foreign key reference to the CleanDataService that processes this CleanRule. |
| DataAssessmentStatus | Type picklist |
| | Properties Create, Defaulted on create, Filter, Group, Nillable |
| | Description The status of the data assessment. The following are valid values: <ul style="list-style-type: none"> • Hidden (default) |

| Field | Details |
|---------------------|---|
| | <ul style="list-style-type: none"> • Not Started • In Progress • Pending Aggregation • Aggregation Complete • Failed Aggregation • Aborted <p>This field is read only.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description User-friendly text that describes the data integration rule.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Create, Filter, Group, , Sort, Update</p> <p>Description This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This unique name prevents conflicts with rules from other packages that have the same MasterLabel.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| IsBulkEnabled | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description If this flag is set to <code>true</code>, the system automatically applies the rule to existing records whenever the rule is updated or saved. If the flag is set to <code>false</code>, the system doesn't automatically apply the rule to existing records. You can always apply the rule manually.</p> |
| IsSilentSaveEnabled | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> |

| Field | Details |
|-----------------|--|
| | <p>Description</p> <p>If <code>false</code>, updates don't modify <code>LastModifiedDate</code> and <code>LastModifiedById</code> when it applies this rule; otherwise, updates insert the current date and the current user.</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description</p> <p>The language of the data integration rule. The following values are permitted:</p> <ul style="list-style-type: none"> Chinese (Simplified): <code>zh_CN</code> Chinese (Traditional): <code>zh_TW</code> Danish: <code>da</code> Dutch: <code>nl_NL</code> English: <code>en_US</code> Finnish: <code>fi</code> French: <code>fr</code> German: <code>de</code> Italian: <code>it</code> Japanese: <code>ja</code> Korean: <code>ko</code> Norwegian: <code>no</code> Portuguese (Brazil): <code>pt_BR</code> Russian: <code>ru</code> Spanish: <code>es</code> Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: <code>sv</code> Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |
| MatchConfidence | <p>Type</p> <p>double</p> <p>Properties</p> <p>Create, Filter, Nillable, Sort, Update</p> <p>Description</p> <p>Indicates how closely a Lightning Data record matches a Salesforce record. The higher the minimum value is set, the more precise the matches. This field is used in packages that support match scores for third-party data. Valid values include an integer determined by the data service provider. If the value is null, the default value from the data service provider is used. Available in API version 45.0 and later.</p> |

| Field | Details |
|----------------------|---|
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Master label for this object. This display value is the internal label that is not translated.</p> |
| MatchRule | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description An internal label for the matching rule in the data service that's associated with this CleanRule.</p> |
| ShouldBypassTriggers | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description If <code>true</code>, indicates that the system does not apply triggers when it applies this rule; otherwise, the system applies the triggers.</p> |
| ShouldBypassWorkflow | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description If <code>true</code>, the system bypasses workflow rules when it applies the data integration rule; otherwise, the system applies workflow rules.</p> |
| SubjectType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description The standard or custom object in your org that's acted on by this CleanRule. The possible values are:</p> <ul style="list-style-type: none"> • Account • Address • Contact • CustomEntityDefinition |

| Field | Details |
|------------------|--|
| | <ul style="list-style-type: none"> • Lead • ResourceAbsence • ServiceAppointment • ServiceTerritory • ServiceTerritoryMember • WorkOrder • WorkOrderLineItem <p>In addition, custom objects with data integration rules are possible.</p> <p> Note: The standard objects are installed with default data integration rules, but only the default rules for account, contact, and lead can be modified.</p> |
| SourceObjectType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description A data service object associated with this CleanRule. The set of picklist values includes all the object types defined in the data service. However, if you specify a non-existent object, the API call returns an error. If you enable the Salesforce data services, the following values appear.</p> <p>CustomEntityDefinition Information retrieved from an external source in the form of an external object to enrich an account, contact, or lead. We map the external object fields to the account, contact, and lead lookup and details.</p> <p>DataCloudAddress Geolocation data service.</p> <p>DatacloudDandBCompany Data.com data service. This service is only available in the Professional, Enterprise, Unlimited, and Performance Editions, and only with a Premium Clean license. Your administrator must enable this data service by enabling the data integration rules for account and lead.</p> <p>If you install Marketplace packages that contain data services, their object names also appear in the set of picklist values.</p> |
| Status | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Status of the data integration rule. Valid values are <code>Active</code> and <code>Inactive</code>.</p> |

ColorDefinition

Represents color metadata for a tab. Available in API version 43.0 and later.



Note: In API version 45.0 and later, only users with the “View Setup and Configuration” permission can access ColorDefinition.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

Query, GET

Fields

| Field Name | Details |
|-----------------|---|
| Color | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The color specified in web color RGB format—for example, 00FF00.</p> |
| Context | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The color context, which determines whether the color is the main color (or primary) for the tab.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn’t guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| TabDefinitionId | <p>Type string</p> |

| Field Name | Details |
|------------|---|
| | Properties Filter, Nillable, Sort Description The ID of the tab this definition belongs to. Defaults to null. |
| Theme | Type string Properties Filter, Group, Nillable, Sort Description The user interface theme this definition is associated with. |

CommunityWorkspacesNode

Represents a node used in Experience Workspaces. Available in Tooling API version 39.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|-------------|---|
| Description | Type string Properties Filter, Nillable, Sort Description A description of the field. |
| DevName | Type string Properties Filter, Group Nillable, Sort |

| Field | Details |
|-------------|--|
| | <p>Description</p> <p>API name of the chart. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.</p> |
| ExternalId | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>A unique system-generated numerical identifier for the user.</p> |
| HelpLocator | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The URL for the help page.</p> |
| Label | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group Nillable</p> <p>, Sort</p> <p>Description</p> <p>The display label of the Workspaces component.</p> |
| Locator | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Nillable, Sort</p> <p>Description</p> <p>The aura component list (aura page) or page URL (aloha page).</p> |
| NetworkID | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> |

| Field | Details |
|-----------|--|
| | Description The ID of the Experience Cloud site. |
| PageType | Type string Properties Filter, Group, Nillable, Sort Description Type of page accessed within Experience Workspaces. |
| Parent | Type string Properties Filter, Group, Nillable, Sort Description The devName of the parent node. |
| Workspace | Type string Properties Filter, Group, Nillable, Sort Description The devName of the workspace the node belongs to. |

CompactLayout

Represents the values that define a compact page layout.

This object is available in API version 32.0 and later.


Supported SOAP Calls

`create()`, `delete()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|-----------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The developer's internal name for the compact layout (for example, "CL_c") used in the API.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The unique name used as the compact layout identifier for API access. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> • <code>installedEditable</code> • <code>released</code> • <code>unmanaged</code> <p>This field is available in API version 38.0 and later.</p> |

| Field | Details |
|-----------------|--|
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The name of the compact layout in Setup.</p> |
| Metadata | <p>Type mns : CompactLayout</p> <p>Properties Create, Nillable, Update</p> <p>Description The compact layout metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the package of which the compact layout is a part.</p> |
| SubjectType | <p>Type Restricted picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The type of object used in the layout, such as an Account or Lead.</p> |



Note: CompactLayout is exposed in Tooling API to user profiles with the View Setup and Configuration permission.

CompactLayoutInfo

Represents the metadata for a custom or standard compact layout.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|--------------------|--|
| DeveloperName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The developer's internal name for the compact layout (for example, <code>CL__c</code>) used in the API.</p> |
| DurableId | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| EntityDefinition | <p>Type</p> <p>EntityDefinition</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>Required. Available starting with version 32.0. The entity definition for the object associated with this CompactLayoutInfo.</p> |
| EntityDefinitionId | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> |

| Field | Details |
|-----------|---|
| | <p>Description</p> <p>Required. ID of the record associated with this CompactLayoutInfo. The record's object type is in <code>EntityDefinition</code>.</p> |
| FullName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>The unique name used as the compact layout identifier for API access. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsDefault | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, this compact layout is the default for the associated object.</p> |
| Items | <p>Type</p> <p>QueryResult</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>A foreign key field pointing to CompactLayoutItemsInfo. Because this field represents a relationship, use only in subqueries.</p> |
| Label | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The compact layout's label.</p> |
| Metadata | <p>Type</p> <p><code>mns:</code> CompactLayout on page 191</p> <p>Properties</p> <p>Create, Nillable, Update</p> |

| Field | Details |
|-----------------|--|
| | <p>Description</p> <p>Metadata that defines compact layouts.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |



Note: CompactLayoutInfo is exposed in Tooling API to user profiles with the View Setup and Configuration permission.

CompactLayoutItemInfo

Represents a field selected for a compact layout, and the order of that field in the compact layout.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|---------------------|---|
| CompactLayoutInfo | <p>Type CompactLayoutInfo</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The compact layout associated with this CompactLayoutItemInfo.</p> |
| CompactLayoutInfoId | <p>Type Id</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the compact layout associated with this field.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description This field reserved for future use. Do not use.</p> |
| FieldDefinition | <p>Type FieldDefinition on page 358</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Required. The definition of this field.</p> |
| FieldDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Required. ID of this field.</p> |

| Field | Details |
|-----------|---|
| SortOrder | Type int Properties Filter, Group, Nillable, Sort Description The order of the field in the compact layout. 1 is first. |

ConnectedApplication

For internal use only.

ContainerAsyncRequest

Allows you to compile and asynchronously deploy a MetadataContainer object to your organization.

Supported SOAP API Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`

Supported REST API HTTP Methods


Query, GET, POST

Special Access Rules

As of the Spring '20 release, to access ContainerAsyncRequest you must have both the View All Data and Customize Application user permissions.

Fields

| Field Name | Details |
|---------------|---|
| DeployDetails | Type DeployDetails Properties Nillable Description Provides detailed XML for any compile errors reported during an asynchronous request. Includes <code>componentFailures</code> . Replaces the JSON field <code>CompilerErrors</code> in Tooling API version 31.0 and later. |

| Field Name | Details |
|---------------------------|---|
| ErrorMsg | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description Errors reported during an asynchronous request.</p> |
| IsCheckOnly | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the asynchronous request compiles the code without making any changes to the organization (<code>true</code>) or compiles and saves the code (<code>false</code>). This field is required.</p> <p> Note: You can compile without saving but you can't save without compiling.</p> |
| IsRunTests | <p>Type boolean</p> <p>Properties None</p> <p>Description Reserved for future use.</p> |
| MetadataContainerId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The ID of a MetadataContainer object. Specify a <code>MetadataContainerId</code> or a <code>MetadataContainerMemberId</code>, but not both.</p> |
| MetadataContainerMemberId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description The ID of an ApexClassMember, ApexTriggerMember, ApexPageMember or ApexComponentMember object.</p> |

| Field Name | Details |
|--------------------|---|
| | Specify a <code>MetadataContainerId</code> or a <code>MetadataContainerMemberId</code> , but not both. |
| <code>State</code> | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The state of the request. Valid values are:</p> <ul style="list-style-type: none"> • <code>Queued</code>—the job is in the queue. • <code>Invalidated</code>—Salesforce canceled the job because the results might not be valid. This state occurs if someone changes the container members while <code>IsCheckOnly=true</code>, or if a newer compile request is added to the queue. • <code>Completed</code>—the compilation or deployment finished. The <code>SymbolTable</code> fields for the specified object(s) were successfully updated. If <code>IsCheckOnly</code> is <code>false</code>, the <code>Body</code> for each object was saved and the <code>MetadataContainerId</code> field for each object was reset from the ID of the deployed MetadataContainer to the ID of the corresponding ContainerAsyncRequest object. • <code>Failed</code>—the compilation or deployment failed for the reasons stated in the <code>CompilerError</code> field. • <code>Error</code>—an unexpected error occurred. The messages in the <code>ErrorMsg</code> field can be provided to Salesforce support if the issue persists. • <code>Aborted</code>—use this value to delete a queued deployment. <p>This field is required.</p> |

Usage

When you deploy a `ContainerAsyncRequest`, you must specify whether to save the compiled entities:

- To compile entities without saving, set the request to `IsCheckOnly=true`. This option is only supported if a `MetadataContainerMember` is specified. A single `MetadataContainerMemberId` can't be compiled without saving.
- To compile and save entities to your organization, set the request to `IsCheckOnly=false`.

If the compile succeeds, the `SymbolTable` field is updated on each object in the specified `MetadataContainer`. If the save or compile fails and a `SymbolTable` field cannot be updated, the field is cleared. If there is an outstanding save request, all updates, inserts, and deployments fail.

To terminate a queued deployment, set the `State` field to `Aborted`.

CspTrustedSite

Represents a trusted URL. For each CspTrustedSite, you can specify Content Security Policy (CSP) directives and permissions policy directives. Each CSP directive allows Lightning components, third-party APIs, and WebSocket connections to access a resource type from the trusted URL. If the Permissions-Policy HTTP header is enabled, each permissions policy directive grants the trusted URL access to a browser feature. In API version 58.0 and earlier, CspTrustedSite included only CSP directives and was referred to as CSP Trusted Sites in Salesforce Setup. Available in API version 39.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Field Type | Description |
|---------------------|---|--|
| CanAccessCamera | boolean | <p>Indicates whether this CspTrustedSite can access the user's camera (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> <p>This field takes effect only when the <code>enablePermissionsPolicy</code> field equals <code>true</code> and the <code>grantCameraAccess</code> field equals <code>TrustedUrls</code> in the SecuritySettings metadata API type.</p> <p>This field is available in API version 59.0 and later.</p> |
| CanAccessMicrophone | boolean | <p>Indicates whether this CspTrustedSite can access the user's microphone (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> <p>This field takes effect only when the <code>enablePermissionsPolicy</code> field equals <code>true</code> and the <code>grantMicrophoneAccess</code> field equals <code>TrustedUrls</code> in the SecuritySettings metadata API type.</p> <p>This field is available in API version 59.0 and later.</p> |
| Context | CspTrustedSiteContext (enumeration of type string) | <p>Declares the scope of the CSP directives for the trusted URL.</p> <ul style="list-style-type: none">• <code>All</code>—Apply the CSP directives to all supported context types. |

| Field | Field Type | Description |
|---------------------------------------|----------------------|---|
| | | <ul style="list-style-type: none"> <code>Communities</code>—Apply the CSP directives to Experience Builder sites only. <code>FieldServiceMobileExtension</code>—Apply the CSP directives to the Field Service Mobile Extensions only. Available in API version 47.0 and later. <code>LEX</code>—Apply the CSP directives to Lightning Experience only. <code>VisualForce</code>—Apply the CSP directives to custom Visualforce pages only. Available in API version 55.0 and later. <p>For custom Visualforce pages, content is restricted to trusted URLs only if the page's <code>cspHeader</code> attribute is set to <code>true</code>.</p> <p>This field is available in API version 44.0 and later.</p> |
| <code>Description</code> | <code>string</code> | The description of this trusted URL. |
| <code>EndpointUrl</code> | <code>string</code> | <p>Required. The URL for this <code>CspTrustedSite</code>.</p> <p>This field must include a domain name and can include a port. For example, <code>https://example.com</code> or <code>https://example.com:8080</code>.</p> <p>To reduce repetition, you can use the wildcard character <code>*</code> (asterisk). For example, <code>*.example.com</code>. For a third-party API, the URL must begin with <code>https://</code>. For example, <code>https://example.com</code>. For a WebSocket connection, the URL must begin with <code>wss://</code>. For example, <code>wss://example.com</code>.</p> |
| <code>IsActive</code> | <code>boolean</code> | Indicates whether this <code>CspTrustedSite</code> is active (<code>true</code>) or not (<code>false</code>). The default value is <code>true</code> . |
| <code>IsApplicableToConnectSrc</code> | <code>boolean</code> | <p>Indicates whether Lightning components, third-party APIs, and WebSocket connections can load URLs using script interfaces from this trusted URL (<code>true</code>) or not (<code>false</code>). This field has a default value of <code>false</code>.</p> <p>This field is available in API version 48.0 and later.</p> |
| <code>IsApplicableToFontSrc</code> | <code>boolean</code> | Indicates whether Lightning components, third-party APIs, and WebSocket connections can load fonts from this trusted URL (<code>true</code>) or not (<code>false</code>). This field is available in API version 48.0 and later. |
| <code>IsApplicableToFrameSrc</code> | <code>boolean</code> | <p>Indicates whether Lightning components, third-party APIs, and WebSocket connections can load resources contained in <code><iframe></code> elements from this trusted URL (<code>true</code>) or not (<code>false</code>). This field has a default value of <code>false</code>.</p> <p>This field is available in API version 48.0 and later.</p> |

| Field | Field Type | Description |
|-------------------------------------|------------|--|
| <code>IsApplicableToImgSrc</code> | boolean | Indicates whether Lightning components, third-party APIs, and WebSocket connections can load images from this trusted URL (<code>true</code>) or not (<code>false</code>). This field has a default value of <code>false</code> . This field is available in API version 48.0 and later. |
| <code>IsApplicableToMediaSrc</code> | boolean | Indicates whether Lightning components, third-party APIs, and WebSocket connections can load audio and video from this trusted URL (<code>true</code>) or not (<code>false</code>). This field has a default value of <code>false</code> . This field is available in API version 48.0 and later. |
| <code>IsApplicableToStyleSrc</code> | boolean | Indicates whether Lightning components, third-party APIs, and WebSocket connections can load style sheets from this trusted URL (<code>true</code>) or not (<code>false</code>). This field has a default value of <code>false</code> . This field is available in API version 48.0 and later. |
| <code>MobileExtension</code> | string | Reserved for future use. |

Usage

For each `CSPTrustedSite`, at least one field starting with `grantAccess` or `isApplicableTo` must be set to `true`.

In API versions 50.0 to 58.0, if all `isApplicable` fields are `false`, the `isApplicableToImgSrc` field is set to `true`. In API version 49.0 and earlier, if all `isApplicable` fields are `false`, those fields all default to `true`.

To ensure smooth integration across Salesforce products, Salesforce includes URLs in each of the CSP directives that correspond to the `isApplicable` fields, even though those URLs aren't defined as `CspTrustedSite` components. Salesforce regularly updates those URLs based on the latest requirements.

CustomApplication

Represents a custom or standard application. An application is a list of tab references, a description, and a logo. It also includes access to the associated `CustomApplication` type and related fields in Metadata API. Available in Tooling API version 42.0 or later.

Supported SOAP Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Supported REST HTTP Methods

Query, GET, POST, PATCH

Fields

| Field Name | Details |
|------------------------------|---|
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The optional description of the application.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The developer name of the application.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the application.</p> |
| IsNavAutoTempTabsDisabled | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the navigation automatically creates temporary tabs settings. Defaults to <code>false</code>. Available in API version 43.0 and later.</p> |
| IsNavPersonalizationDisabled | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether navigation personalization is disabled. Defaults to <code>false</code>. Available in API version 43.0 and later.</p> |
| IsNavTabPersistenceDisabled | <p>Type boolean</p> |

| Field Name | Details |
|-----------------|---|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether workspace tabs are cleared for each new console session (<code>true</code>) or not (<code>false</code>). Defaults to <code>false</code>. Available in API version 54.0 and later.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The label of the application.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> • <code>installedEditable</code> • <code>released</code> • <code>unmanaged</code> |
| Metadata | <p>Type mns:CustomApplication</p> <p>Properties Create, Nillable, Update</p> <p>Description Provides access to the associated CustomApplication type and related fields in Metadata API.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field Name | Details |
|--------------|--|
| | Description The namespace prefix of the application. |
| NavType | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort Description Not updateable. The type of navigation the application uses. Valid values are: <ul style="list-style-type: none"> • Console • Standard |
| UiType | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort Description The type of user interface that the application uses. Valid values are: <ul style="list-style-type: none"> • Aloha • Lightning |
| UtilityBar | Type FlexiPage Properties Filter, Group, Nillable, Sort Description The Lightning page used as the utility bar for the application. |
| UtilityBarId | Type reference Properties Filter, Group, Nillable, Sort Description The ID of the utility bar associated with this application. |

CustomField

Represents a custom field on a custom object that stores data unique to your organization. Includes access to the associated CustomField object and related fields in Salesforce Metadata API. Available from API version 28.0 or later.

Supported SOAP Calls

`create()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST HTTP Methods

Query, GET, POST, PATCH

Fields

| Field Name | Details |
|-----------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The developer's internal name for the custom field. For example, the internal name for the custom field CF__c is CF.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Metadata | <p>Type CustomFieldMetadata</p> <p>Properties Create, Nillable, Update</p> <p>Description CustomFieldMetadata includes the following fields:</p> <ul style="list-style-type: none"> • caseSensitive |

Field Name**Details**

-
- `defaultValue`
 - `deleteConstraint`
 - `deprecated*`
 - `description`
 - `displayFormat`
 - `displayLocationInDecimal`
 - `escapeMarkup`
 - `externalDeveloperName`
 - `externalId`
 - `formula`
 - `formulaTreatBlanksAs`
 - `inlineHelpText`
 - `isFilteringDisabled`
 - `isNameField`
 - `isSortingDisabled`
 - `label`
 - `length`
 - `maskChar`
 - `maskType`
 - `picklist`
 - `populateExistingRows`
 - `precision`
 - `readOnlyProxy`
 - `referenceTo`
 - `relationshipLabel`
 - `relationshipName`
 - `relationshipOrder`
 - `reparentableMasterDetail`
 - `required`
 - `restrictedAdminField`
 - `scale`
 - `startingNumber`
 - `stripMarkup`
 - `summarizedField`
 - `summaryFilterItems`
 - `summaryForeignKey`
 - `summaryOperation`
 - `trackFeedHistory`
-

| Field Name | Details |
|-----------------|--|
| | <ul style="list-style-type: none"> trackHistory type unique visibleLines writeRequiresMasterRead <p>* Reserved for future use.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the custom field. A custom field can be in an extension namespace different than the object.</p> |
| TableEnumOrId | <p>Type Restricted picklist</p> <p>Properties Filter, Group, Sort</p> <p>Description The enum (for example, Account) or ID of the object this field is on.</p> |

CustomFieldMember

Represents the working copy of a field for editing or saving in a MetadataContainer. This object is available in API version 33.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Special Access Rules

To access CustomFieldMember, you must have both the View All Data and Customize Application user permissions.

Fields

| Field Name | Details |
|-----------------|--|
| Content | <p>Type string</p> <p>Properties None</p> <p>Description A string representation of CustomField that contains the field's metadata.</p> |
| ContentEntityId | <p>Type ID</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description A reference to a custom field. There can be only one <code>ContentEntityId</code> per CustomField, otherwise, an error is reported.</p> |
| FullName | <p>Type string</p> <p>Properties Group, Nillable</p> <p>Description The full name of the associated object in the Metadata API. Use to avoid race conditions on create, before you have IDs. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsDeleted | <p>Type boolean</p> <p>Properties Group, Nillable</p> <p>Description Indicates whether the object is marked as deleted (<code>true</code>) or not (<code>false</code>).</p> |
| LastSyncDate | <p>Type dateTime</p> <p>Properties Filter, Sort</p> |

| Field Name | Details |
|------------|---|
| | Description The date that this CustomField was replicated from the underlying entity. |
| Metadata | Type CustomField Properties None Description An object that describes the version, status, and packaged versions of the corresponding CustomField. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |

CustomHelpMenuSection

Represents a section of the Lightning Experience help menu that the admin added to display custom, org-specific help resources. Available in API version 45.0 and later.

Supported SOAP Calls



`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

`Query`, `DELETE`, `GET`, `POST`, `PATCH`

Fields

| Field | Details |
|---------------|---|
| DeveloperName | Type string Properties Filter, Group, Sort Description The unique name of the custom help section in the API. This name can contain only underscores and alphanumeric characters and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The label corresponds to section title in the user interface. Limit: 80 characters. |

| Field | Details |
|-----------------|---|
| | <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance slows down while Salesforce generates one for each record.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| Fullname | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata object in Metadata API.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Required. Language of the label.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> |

| Field | Details |
|-----------------|---|
| | <p>Properties Filter, Group, Sort</p> <p>Description The name of the resource. Specify up to 100 characters.</p> |
| Metadata | <p>Type mns:CustomHelpMenuSection</p> <p>Properties Create, Nillable, Update</p> <p>Description Metadata for the item contained in the custom help section, including label, URL, and sort order.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |

CustomHttpHeader

Represents a custom HTTP header used with OData 2.0 or OData 4.0 external data sources. Custom HTTP headers provide context information from Salesforce such as region, org details, or the role of the person viewing the external object. This object is available in API version 51.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|------------------|---|
| Description | <p>Type textarea</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description A text description of the header field's purpose.</p> |
| HeaderFieldName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Name of the header field. The name must contain at least one alphanumeric character or underscore. It can also include: ! # \$ % & ' * + - . ^ _ ` ~</p> |
| HeaderFieldValue | <p>Type string</p> <p>Properties Create, Filter, Sort, Update</p> <p>Description A formula that resolves to the value for the header. The values in the formula must evaluate to a string. If the formula resolves to null and an empty string, the header isn't sent.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether the custom HTTP header is available to use (<code>true</code>) or unavailable (<code>false</code>).</p> |
| ParentId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description ID of the entity to which this custom HTTP header is related.</p> |

CustomNotificationType

Stores information about custom notification types. This object is available in API version 46.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported Calls


`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Fields

| Field | Details |
|---------------------|--|
| CustomNotifTypeName | <p>Type string</p> <p>Properties Create, Filter, Group, idLookup, Sort, Unique, Update</p> <p>Description Specifies a notification type name. The notification type name is unique within your organization. Maximum number of characters: 80.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Specifies a general description of the notification type, which is displayed with the notification type name. Maximum number of characters: 255.</p> |
| Desktop | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether the desktop delivery channel is enabled (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> |

| Field | Details |
|-----------------|---|
| | Description Specifies the API name of the notification type. |
| IsSlack | Type boolean Properties Reserved for future use. Description Reserved for future use. |
| Language | Type picklist Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update Description Specifies the language of the custom notification type. The value for this field is the language value of the org. |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort Description Indicates the manageable state of the specified component that is contained in a package: <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | Type string Properties Create, Filter, Group, Sort, Update Description Specifies the notification type label. |

| Field | Details |
|-----------------|--|
| Mobile | Type boolean Properties Create, Defaulted on create, Filter, Group, Sort, Update Description Indicates whether the mobile delivery channel is enabled (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code> . |
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description Specifies the namespace of the notification type, if installed with a managed package. |

 **Note:** CustomNotificationType is exposed in Tooling API to user profiles with the View Setup and Configuration permission. To create and edit notification types, the Customize Application permission is required.

CustomObject

Represents a custom object that stores data unique to your organization. Includes access to the associated CustomObject object and related fields in Salesforce Metadata API. Available from API version 31.0 or later.

Supported SOAP Calls

`query()`, `retrieve()`, `search()`

Supported REST HTTP Methods

Query, GET

Fields

| Field Name | Details |
|--------------|--|
| CustomHelpId | Type ID Properties Filter, Group, Nillable, Sort |

| Field Name | Details |
|--------------------|---|
| | Description The control that contains the help content if this custom object has customized help content. |
| Description | Type string Properties Filter, Nillable, Sort Description The object's description. This can be useful to describe the reason for creating the object or its intended use. |
| DeveloperName | Type string Properties Filter, Group, Sort Description The developer's internal name for the custom object. For example, the internal name for the custom object CO__c is CO. |
| ExternalName | Type string Properties Filter, Group, Nillable, Sort Description Maps to a table in the external data source. If you created the external object using Validate and Sync for the data source, this name is automatically created. |
| ExternalRepository | Type string Properties Filter, Group, Nillable, Sort Description Maps to a table in the external data source. If you created the external object using Validate and Sync for the data source, this name is automatically created; do not modify it. |
| Language | Type string Properties Filter, Group, Restricted picklist, Sort |

| Field Name | Details |
|-----------------|--|
| | <p>Description</p> <p>The language of the action. Valid values are:</p> <ul style="list-style-type: none"> Chinese (Simplified): <code>zh_CN</code> Chinese (Traditional): <code>zh_TW</code> Danish: <code>da</code> Dutch: <code>n1_NL</code> English: <code>en_US</code> Finnish: <code>fi</code> French: <code>fr</code> German: <code>de</code> Italian: <code>it</code> Japanese: <code>ja</code> Korean: <code>ko</code> Norwegian: <code>no</code> Portuguese (Brazil): <code>pt_BR</code> Russian: <code>ru</code> Spanish: <code>es</code> Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: <code>sv</code> Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |
| ManageableState | <p>Type</p> <p>ManageableState enumerated list</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> <code>beta</code> <code>deleted</code> <code>deprecated</code> <code>deprecatedEditable</code> <code>installed</code> <code>installedEditable</code> <code>released</code> <code>unmanaged</code> |

| Field Name | Details |
|-----------------|--|
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description The namespace of the package of which the custom object is a part. |
| SharingModel | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort Description The sharing model. Values are: <ul style="list-style-type: none">EditControlledByparentNoneRead |

CustomTab

Represents a custom tab.

This object is available in the Tooling API version 33.0 and later.

Supported Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Fields

| Field | Details |
|-----------|--|
| ContentId | Type reference Properties Filter, Group, Nillable, Sort Description Read-only. The ID of the item that the custom tab points to. For Lightning components, this is the ID of the component bundle. For custom object tabs, this field is <code>null</code> . |

| Field | Details |
|---------------|---|
| Description | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The tab's description.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The developer's internal name for the custom tab.</p> |
| EncodingKey | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Read-only. Type of encoding assigned to the URL called by the tab. The default encoding setting is Unicode: UTF-8. Change it if you are passing information to a URL that requires data in a different format. This option is available when the value URL is selected in the tab type. Valid values are:</p> <ul style="list-style-type: none"> • UTF-8—Unicode (UTF-8) • ISO-8859-1—General US & Western Europe (ISO-8859-1, ISO-LATIN-1) • Shift_JIS—Japanese (Shift-JIS) • ISO-2022-JP—Japanese (JIS) • EUC-JP—Japanese (EUC-JP) • x-SJIS_0213—Japanese (Shift-JIS_2004) • ks_c_5601-1987—Korean (ks_c_5601-1987) • Big5—Traditional Chinese (Big5) • GB2312—Simplified Chinese (GB2312) • Big5-HKSCS—Traditional Chinese Hong Kong (Big5-HKSCS) |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The name of the tab. The value of this field depends on the type of tab, and the API version.</p> |

| Field | Details |
|-----------------|--|
| | <ul style="list-style-type: none"> For custom object tabs, the <code>fullName</code> is the developer-assigned name of the custom object (MyCustomObject__c, for example). For Web tabs, the <code>fullName</code> is the developer-assigned name of the tab (MyWebTab, for example). <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| HasSidebar | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates if the tab displays the sidebar panel.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> beta deleted deprecated deprecatedEditable installed installedEditable released unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, idLookup, Nillable, Sort</p> <p>Description Required. The label for the custom tab, which displays in Setup.</p> |
| Metadata | <p>Type CustomTabMetadata</p> <p>Properties Create, Nillable, Update</p> |

| Field | Details |
|-----------------|---|
| | <p>Description</p> <p>Custom tab metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| MotifName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>Read-only. The name of the tab style assigned to the custom tab.</p> |
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace of the package of which the custom tab is a part.</p> |
| Type | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>The type of custom tab. Valid values are:</p> <ul style="list-style-type: none"> • apexPage • aura • customObject • flexiPage • sControl • url |
| Url | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Nillable, Sort</p> <p>Description</p> <p>The URL for the external web-page to embed in this tab.</p> |

DataAssessmentConfigItem

Represents a saved configuration for a specific vendor's package for data assessment. This object is available in API version 40.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|---------------------------|--|
| DataAssessmentConfigField | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description A list of fields on the external object that a specific data package supports.</p> |
| DataAssessmentConfigValue | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The configuration value selected for a field in <code>DataAssessmentConfigField</code>.</p> |
| SubjectType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable</p> <p>Description The object's API name.</p> |

Usage

The following example adds a new configuration for the configuration field on the external data source.

```
{
  "SubjectType" : "01Ixx0000003S4f", //External object Id or api name
  "DataAssessmentConfigField" : "00Nxx000001DRL8", //Custom field Id or api name
}
```

```
"DataAssessmentConfigValue" : "Salesforce" // value
}
```

DataIntegrationRecordPurchasePermission

Represents Lightning Data purchase credits that a Salesforce admin has granted to users. Available in Tooling API version 42.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, HEAD, and POST

For operations on a specific object, DataIntegrationRecordPurchasePermission supports GET, PATCH, DELETE, and HEAD.

Special Access Rules

As of Spring '20 and later, only your Salesforce org's internal users can access this object.

Fields

| Field | Details |
|-------------------------|---|
| ExternalObject | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description This field can hold a single value: the name of the data service record matched to the Salesforce record.</p> |
| UserId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The ID of a user to whom purchase credits are assigned.</p> |
| UserRecordPurchaseLimit | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> |

| Field | Details |
|-------|--|
| | Description The number of purchase credits assigned to a user. |

Usage

Sample GET response:

```
{
  "attributes" : {
    "type" : "DataIntegrationRecordPurchasePermission",
    "url" :
"/services/data/v42.0/tooling/subjects/DataIntegrationRecordPurchasePermission/0GyR0000000009xKAA"

  },
  "Id" : "0GyR0000000009xKAA",
  "IsDeleted" : false,
  "CreatedDate" : "2017-11-02T22:02:36.000+0000",
  "CreatedById" : "005R00000000F4ItIAK",
  "LastModifiedDate" : "2017-12-12T18:22:35.000+0000",
  "LastModifiedById" : "005R00000000F4ItIAK",
  "SystemModstamp" : "2017-12-12T18:22:35.000+0000",
  "UserId" : "005R00000000F4ItIAK",
  "ExternalObject" : "managedPackageNamespace__CustomObject__x",
  "UserRecordPurchaseLimit" : 300
}
```

DataType

Represents the datatype of a field. Use this object with EntityDefinition, EntityParticle, or FieldDefinition to simplify queries. Available in Tooling API version 34.0 and later.

Supported SOAP Calls

query()

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Special Access Rules

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

| Field | Details |
|--------------------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name.</p> |
| ContextServiceDataTypeId | Don't use this field. It's reserved for future use. Properties and behavior are likely to change. |
| ContextWsdldataTypeId | Don't use this field. It's reserved for future use. Properties and behavior are likely to change. |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| IsComplex | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the datatype contains other datatypes, in contrast to a simple datatype like string.</p> |



Note: DataType fields are exposed in SOAP API version 45.0 and later. You can use Tooling API to query for DataType fields in guest user mode in API version 44.0 and earlier. In API version 45.0 and later, use SOAP API to get this data in guest user mode. DataType is still exposed in Tooling API to User Profiles with the ViewSetup permission.

Example

From an object, retrieve all the fields of one datatype.

```
SELECT DataType, QualifiedApiName
FROM EntityParticle
WHERE DataType = 'phone' AND
      EntityDefinition.QualifiedApiName = 'Account'
```

SOQL Limitations

This object doesn't support some SOQL operations.

GROUP BY

Example Query: `SELECT COUNT(qualifiedapiname), isfeedenabled FROM EntityDefinition GROUP BY isfeedenabled`

Error Returned: The requested operation is not yet supported by this SObject storage type, contact salesforce.com support for more information.

LIMIT, LIMIT OFFSET

Example Queries:

`SELECT qualifiedapiname FROM EntityDefinition LIMIT 5`

`SELECT qualifiedapiname FROM EntityDefinition LIMIT 5 OFFSET 10`

An incorrect result is returned because LIMIT and LIMIT OFFSET are ignored.

NOT

Example Query: `SELECT qualifiedapiname FROM EntityDefinition WHERE qualifiedapiname!='Account'`

Error Returned: Only equals comparisons permitted

OR

Example Query: `SELECT qualifiedapiname, keyprefix FROM EntityDefinition WHERE isdeletable=true OR (isfeedenabled=false AND keyprefix='01j')`

Error Returned: Disjunctions not supported

INCLUDES

Example Query: `SELECT ComplianceGroup FROM FieldDefinition WHERE EntityDefinitionId = 'Account' AND ComplianceGroup includes('GDPR')`

Error Returned: Unsupported filter type

DebugLevel

Represents a set of log category levels to assign to a `TraceFlag` object. Multiple trace flags can use a debug level.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`


Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|---------------|--|
| ApexCode | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category level for Apex code. Includes information about Apex code. Can also include log messages generated by data manipulation language (DML) statements, inline SOQL or SOSL queries, the start and completion of triggers, the start and completion of test methods, and so on. The following are valid values.</p> <ul style="list-style-type: none"> • NONE • ERROR • WARN • INFO • DEBUG • FINE • FINER • FINEST <p>This field is required.</p> |
| ApexProfiling | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category level for profiling information. Includes cumulative profiling information, such as the limits for your namespace, the number of emails sent, and so on. The following are valid values.</p> <ul style="list-style-type: none"> • NONE • ERROR • WARN • INFO • DEBUG • FINE |

| Field Name | Details |
|------------|--|
| | <ul style="list-style-type: none"> • FINER • FINEST <p>This field is required.</p> |
| Callout | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category level for callouts. Includes the request-response XML that the server is sending and receiving from an external Web service. The request-response XML is useful when debugging issues related to SOAP API calls. The following are valid values.</p> <ul style="list-style-type: none"> • NONE • ERROR • WARN • INFO • DEBUG • FINE • FINER • FINEST <p>This field is required.</p> |
| Database | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category for database activity. Includes information about database activity, including every DML statement or inline SOQL or SOSL query. The following are valid values.</p> <ul style="list-style-type: none"> • NONE • ERROR • WARN • INFO • DEBUG • FINE • FINER • FINEST <p>This field is required.</p> |

| Field Name | Details |
|---------------|--|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The developer's internal name for the debug level. Also displays in the Developer Console and in Setup.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The language of the <code>MasterLabel</code>. Valid values are:</p> <ul style="list-style-type: none"> Chinese (Simplified): <code>zh_CN</code> Chinese (Traditional): <code>zh_TW</code> Danish: <code>da</code> Dutch: <code>n1_NL</code> English: <code>en_US</code> Finnish: <code>fi</code> French: <code>fr</code> German: <code>de</code> Italian: <code>it</code> Japanese: <code>ja</code> Korean: <code>ko</code> Norwegian: <code>no</code> Portuguese (Brazil): <code>pt_BR</code> Russian: <code>ru</code> Spanish: <code>es</code> Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: <code>sv</code> Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |
| MasterLabel | <p>Type string</p> |

| Field Name | Details |
|------------|--|
| | <p>Properties Filter, Group, Sort</p> <p>Description Reserved for future use. However, this field is required and must contain a value. We suggest that you use the same value used for <code>DeveloperName</code>.</p> |
| System | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category level for calls to all system methods, such as the <code>System.debug</code> method. The following are valid values.</p> <ul style="list-style-type: none">• NONE• ERROR• WARN• INFO• DEBUG• FINE• FINER• FINEST <p>This field is required.</p> |
| Validation | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category level for validation rules. Includes information about validation rules, such as the name of the rule, or whether the rule evaluated <code>true</code> or <code>false</code>. The following are valid values.</p> <ul style="list-style-type: none">• NONE• ERROR• WARN• INFO• DEBUG• FINE• FINER• FINEST <p>This field is required.</p> |

| Field Name | Details |
|-------------|--|
| Visualforce | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category level for Visualforce. Includes information about Visualforce events, including serialization and deserialization of the view state or the evaluation of a formula field in a Visualforce page. The following are valid values.</p> <ul style="list-style-type: none">• NONE• ERROR• WARN• INFO• DEBUG• FINE• FINER• FINEST <p>This field is required.</p> |
| Workflow | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category level for workflow rules. Includes information for workflow rules, such as the rule name and the actions taken. This field is required. The following are valid values.</p> <ul style="list-style-type: none">• NONE• ERROR• WARN• INFO• DEBUG• FINE• FINER• FINEST |

Usage

If you delete a debug level, all the trace flags that use it are deleted.

DelegateGroup

Represents a Delegate Group for queries. This object is available in Tooling API version 57.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|----------------------|--|
| DeveloperName | Type string Properties Create, Filter, Group, Sort, Update Description The unique developer name for the delegate group. |
| IsLoginAccessEnabled | Type boolean Properties Create, Defaulted on create, Filter, Group, Sort, Update Description Indicates login access is enabled for the developer group. The default value is <code>false</code> . |
| Name | Type string Properties Create, Filter, Group, idLookup, Sort, Update Description The label for the developer group. |

DelegateGroupGrant

Represents a Delegate Group Grant, indicating permissions granted to a delegate group. This object is available in Tooling API version 57.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|-----------------|---|
| DelegateGroupId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The id for the associated delegate group.</p> |
| GrantedId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description The id for the associated object granted to the delegate group. This field is a polymorphic relationship field.</p> <p>Relationship Name null</p> <p>Relationship Type Lookup</p> <p>Refers To CustomObject, Group, PermissionSet, PermissionSetGroup, Profile, User, UserRole</p> |
| KeyPrefix | <p>Type string</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Sort</p> <p>Description The prefix of the object id that designates the object type.</p> |

DelegateGroupMember

Represents users assigned to the delegate group This object is available in Tooling API version 57.0 and later.


Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|-----------------|---|
| DelegateGroupId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The id of the associated delegate group.</p> |
| UserOrGroupId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description The reference indicating the user id of the delegated administrator for the delegate group.</p> <p> Note: User is the only valid value for this field. Group is reserved for future development.</p> <p>This field is a polymorphic relationship field.</p> <p>Relationship Name null</p> <p>Relationship Type Lookup</p> <p>Refers To Group, User</p> |

DeployDetails

A complex type that contains detailed XML for any compile errors reported in the asynchronous request defined by a ContainerAsyncRequest object. Replaces the JSON field `CompilerErrors` in Tooling API version 31.0 and later.

Fields

| Field | Details |
|-------------------|--|
| componentFailures | <div><div>Type</div><div>string</div><div>Description</div><div>The line number, component name and a short description for any compile errors. For example:</div><div><pre><DeployDetails> <componentFailures> <lineNumber>5</lineNumber> <fullName>myApex</fileName> <problem>invalid name 'abc'</problem> </componentFailures> <componentFailures> <lineNumber>10</lineNumber> <fullName>myApex2</fileName> <problem>invalid type 'hello'</problem> </componentFailures> </DeployDetails></pre></div></div> |

Document

Represents a file that a user has uploaded. Unlike Attachment records, documents are not attached to a parent object. Available in Tooling API version 38.0 and later.

Supported SOAP Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Supported REST HTTP Methods


GET

Limitations

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|-------------|--|
| AuthorId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description ID of the user who is responsible for the document.</p> |
| Body | <p>Type base64</p> <p>Properties Nillable</p> <p>Description Required. Encoded file data. If specified, then do not specify a URL.</p> |
| BodyLength | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description Size of the file (in bytes). If specified, then do not specify a URL.</p> |
| ContentType | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Type of content. Label is Mime Type. Limit: 120 characters. If the Don't allow HTML uploads as attachments or document records security setting is enabled for your organization, you cannot upload files with the following file extensions: .htm, .html, .htt, .htx, .mhtm, .mhtml, .shtm, .shtml, .acgi, .svg.</p> |
| Description | <p>Type textarea</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Text description of the document. Limit: 255 characters.</p> |

| Field | Details |
|-------------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Document Unique Name.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> |
| FolderId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. ID of the folder that contains the document.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsBodySearchable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the contents of the object can be searched using a SOSL <code>FIND</code> call. The <code>ALL FIELDS</code> search group includes the content as a searchable field.</p> |
| IsInternalUseOnly | <p>Type boolean</p> |

| Field | Details |
|--------------------|---|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the object is only available for internal use (<code>true</code>) or not (<code>false</code>). Label is Internal Use Only.</p> |
| IsPublic | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the object is available for external use (<code>true</code>) or not (<code>false</code>). Label is Externally Available.</p> |
| Keywords | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Keywords. Limit: 255 characters.</p> |
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed a record related to this record.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp for when the current user last viewed this record. If this value is null, this record might only have been referenced (<code>LastReferencedDate</code>) and not viewed.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> |

| Field | Details |
|-----------------|--|
| | <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Metadata | <p>Type complexvalue</p> <p>Properties Create, Nillable, Update</p> <p>Description The metadata for this object as defined in the Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> <p>Description Required. Name of the document. Label is Document Name.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation. The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. |

| Field | Details |
|-------|--|
| | <ul style="list-style-type: none"> In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |
| Type | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description File type of the document. In general, the values match the file extension for the type of document (such as pdf or jpg). Label is File Extension.</p> |
| Url | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description URL reference to the file (used instead of storing it in the database). If specified, do not specify the <code>Body</code> or <code>BodyLength</code>.</p> |

DuplicateJobDefinition

Setup object defining a job that identifies duplicate record items globally. Available in Tooling API version 42.0 and later.

Supported SOAP Calls


`create()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET and POST

Fields

| Field | Details |
|---------------|--|
| DeveloperName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> |

| Field | Details |
|----------------|--|
| | <p>Description</p> <p>The developer name of the DuplicateJobDefinition.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description</p> <p>The language in the user's personal settings.</p> |
| MasterLabel | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Update</p> <p>Description</p> <p>The label of the DuplicateJobDefinition.</p> |
| SubjectSubtype | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description</p> <p>The object subtype. Valid values are <code>PersonAccount</code> and <code>None</code>.</p> |
| SubjectType | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>The object type: <code>Account</code>, <code>Contact</code>, or <code>Lead</code>.</p> |

DuplicateJobMatchingRuleDefinition

Setup object specifying a MatchingRule to use with DuplicateJob instances that share a DuplicateJobDefinition. Available in Tooling API version 42.0 and later.

Supported SOAP Calls

`create()`, `query()`, `retrieve()`

Supported REST HTTP Methods

GET and POST

Fields

| Field | Details |
|--------------------------|--|
| DuplicateJobDefinitionId | Type reference Properties Create, Filter, Group, Sort Description The ID of the duplicate job definition. |
| MatchingRuleId | Type reference Properties Create, Filter, Group, Nillable, Sort Description The ID of the matching rule specified for a duplicate job. |

EmailTemplate

Represents a template for an email, mass email, list email, or Sales Engagement email. Supported in first-generation managed packages only.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`create()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|-----------------|--|
| ApiVersion | <p>Type double</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The API version if this is a Visualforce email template. Every Visualforce email template has an API version specified at creation.</p> |
| Description | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The email template description. This can be useful to describe the reason for creating the template or its intended use.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The unique name used as the template identifier for API access. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> |

| Field | Details |
|-------------------|--|
| | <ul style="list-style-type: none"> installedEditable released unmanaged |
| Metadata | <p>Type EmailTemplateMetadata</p> <p>Properties Create, Nillable, Update</p> <p>Description Email template metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> <p>Description The email template name.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description A unique string to distinguish this template from any others. For example, if this template is being using by a flow, use the <code>NamespacePrefix</code> to uniquely identify the templates in multiple flow instances.</p> |
| RelatedEntityType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description When <code>UIType</code> is 2 (Lightning Experience) or 3 (Lightning ExperienceSample), <code>RelatedEntityType</code> indicates which entities this template can be used with. Valid values are the entity API name: "Account" for account, "Contact" for contact, "Opportunity" for opportunity, "Lead" for lead, and so on. The value can be any entity the user has read access to (including custom entities) but not virtual entities, setup entities, or platform entities.</p> <p>No restrictions exist at the schema level.</p> |

| Field | Details |
|---------|--|
| Subject | Type string Properties Group, Nillable, Sort Description The email subject. The limit is 1,000 characters for Lightning email templates and 230 characters for Classic email templates. |
| UiType | Type picklist Properties Create, Filter, Group, Restricted picklist, Sort Description Indicates the user interface where this template is usable. Valid values are: 1 (Salesforce Classic), 2 (Lightning Experience), and 3 (Lightning Experience Sample). |

EmbeddedServiceBranding

Represents branding for each Embedded Service deployment. Available in Tooling API version 39.0 and later.

Supported SOAP Calls



`create()`, `delete()`, `describe()`, `query()`, `retrieve()`, `update()`

Supported REST HTTP Methods

DELETE, GET, HEAD, PATCH, POST, PUT, Query

Fields

| Field | Details |
|-----------------------|--|
| ContrastInvertedColor | Type string Properties Filter, Group, Nillable Sort Description Accent branding color used in the embedded component, displayed as a hexadecimal value. Changes made to this field in the API aren't reflected in the embedded component. Available in API version 43.0 and later. |

| Field | Details |
|----------------------|---|
| ContrastPrimaryColor | <p>Type string</p> <p>Properties Filter, Group, Nillable Sort</p> <p>Description Accent branding color used in the embedded component, displayed as a hexadecimal value.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the branding component.</p> <p>This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| Font | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Font used in the text of the embedded component.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated EmbeddedServiceBranding in Metadata API. The full name can include a namespaceprefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|-----------------|---|
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the embedded component. Possible values are:</p> <ul style="list-style-type: none"> • ar—Arabic • da—Danish • de—German • en_US—English • es—Spanish • fi—Finnish • fr—French • iw—Hebrew • ja—Japanese • ko—Korean • nl_BE—Dutch (Belgium) • no—Norwegian • pt_BR—Portuguese (Brazil) • ru—Russian • sv—Swedish • th—Thai • ur—Urdu • zh_CN—Chinese (Simplified) • zh_TW—Chinese (Traditional) |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable |

| Field | Details |
|-----------------|---|
| | <ul style="list-style-type: none"> released unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Label for the embedded component.</p> |
| Metadata | <p>Type EmbeddedServiceBranding</p> <p>Properties Create, Nillable, Update</p> <p>Description The embedded service branding's metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation. The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |
| NavBarColor | <p>Type string</p> |

| Field | Details |
|----------------------|---|
| | Properties Create, Filter, Group, Sort, Update Description Color used for the navigation bar in the embedded component. |
| NavBarTextColor | Type string Properties Filter, Group, Nillable, Sort Description Color used for the text and icons in the header in the embedded component, displayed as a hexadecimal value. Available in API version 49.0 and later. |
| PrimaryColor | Type string Properties Create, Filter, Group, Sort, Update Description Primary branding color used in the embedded component. |
| SecondaryColor | Type string Properties Create, Filter, Group, Sort, Update Description Secondary branding color used in the embedded component. |
| SecondaryNavBarColor | Type string Properties Filter, Group, Nillable, Sort Description Secondary branding color used for the header in the embedded component, displayed as a hexadecimal value. It applies to the header in the chat feature when it's trying to reconnect because of lost internet connection. Available in API version 49.0 and later. |

EmbeddedServiceConfig

Represents a setup node for creating an Embedded Service deployment. Available in API version 38.0 and later.

Supported Calls


`create()`, `delete()`, `describeSObjects()`, `describeLayout()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, POST, PATCH, DELETE

Fields

| Field | Details |
|-----------------------------------|--|
| <code>AreGuestUsersAllowed</code> | <p>Type boolean</p> <p>Properties Defaulted on Create, Filter, Group, Sort</p> <p>Description Specifies whether a user must be logged in to access an embedded component. Available in API version 45.0 and later.</p> |
| <code>AuthMethod</code> | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Type of login method selected for this Embedded Service deployment. Valid values are:</p> <ul style="list-style-type: none">• <code>CommunitiesLogin</code>• <code>CustomLogin</code> <p>Available in API version 43.0 and later.</p> |
| <code>BrandingId</code> | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The developer name of the associated BrandingSet. Used only for Embedded Service Deployments of the Messaging type. Used only when</p> |

| Field | Details |
|----------------------------|---|
| | <p>DeploymentFeature is EmbeddedMessaging. Available in API version 52.0 and later.</p> <p>This is a relationship field.</p> <p>Relationship Name Branding</p> <p>Relationship Type Lookup</p> <p>Refers To BrandingSet</p> |
| CustomMinimizedComponentId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Removed. The custom Lightning component that's used for the minimized state for this Embedded Chat deployment. Available in API version 38.0 to 45.0.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Unique name for the Embedded Service configuration setup node.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| DeploymentFeature | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Where the Embedded Service deployment is used. Once set, this value</p> |

Field**Details**

can't be updated. Available in API version 52.0 and later.

Possible values are:

- EmbeddedMessaging
- FieldService
- Flows
- LiveAgent
- None

DeploymentType

Type

picklist

Properties

Filter, Group, Restricted picklist, Sort

Description

Set a conversation type for your embedded deployment. This field is available in version 51.0 and later.

Possible values are:

- Mobile
- Web

FullName

Type

string

Properties

Create, Group, Nillable

Description

The unique name used for this Embedded Service deployment. The fullName can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.

Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.

Field

IsEnabled

Details**Type**

boolean

Properties

Defaulted on Create, Filter, Group, Sort

Description

Specifies if the Embedded Service Deployment is enabled for use.
Available in API version 52.0 and later.

Language

Type

picklist

Properties

Defaulted on create, Filter, Group,
Nillable, Restricted picklist, Sort

Description

Languages supported in the Embedded Service deployment.

- Chinese (Simplified): zh_CN
- Chinese (Traditional): zh_TW
- Danish: da
- Dutch: nl_NL
- English: en_US
- Finnish: fi
- French: fr
- German: de
- Italian: it
- Japanese: ja
- Korean: ko
- Norwegian: no
- Portuguese (Brazil): pt_BR
- Russian: ru
- Spanish: es
- Spanish (Mexico): es_MX Spanish (Mexico) defaults to Spanish for customer-defined translations.
- Swedish: sv
- Thai: th The Salesforce user interface is fully translated to Thai, but Help is in English.

Field**Details**

ManageableState

Type

ManageableState enumerated list

Properties

Filter, Group, Nillable, Restricted picklist, Sort

Description

Indicates the manageable state of the specified component that is contained in a package:

- beta
- deleted
- deprecated
- deprecatedEditable
- installed
- installedEditable
- released
- unmanaged

MasterLabel

Type

string

Properties

Filter, Group, Sort

Description

Name of the embedded service configuration node.

Metadata

Type

mns : EmbeddedServiceConfig

Properties

Create, Nillable, Update

Description

The Embedded Service configuration metadata.

Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.

NamespacePrefix

Type

string

Field

Details

Properties

Filter, Group, Nillable, Sort

Description

The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the

namespacePrefix__componentName notation.

The namespace prefix can have one of the following values.

- In Developer Edition orgs, `NamespacePrefix` is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer.
- In orgs that are not Developer Edition orgs, `NamespacePrefix` is set only for objects that are part of an installed managed package. All other objects have no namespace prefix.

`ShouldHideAuthDialog`

Type

boolean

Properties

Defaulted on create, Filter, Group, Sort

Description

Specifies whether the prompt that the customer login again during a flow is hidden (`true`) or not (`false`). When it's hidden, the customer is taken directly to your login page. This field is set to `false` by default. Available in API version 43.0 and later.

EmbeddedServiceCustomComponent

Represents a custom component created for an Embedded Service feature. The custom components can be an Aura or Lightning Web Component. This object is available in API version 44.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

This type is available only if Salesforce Experiences and Salesforce Sites are enabled in your org. To access this type, you need the Customize Application user permission.

Fields

| Field | Details |
|---------------------|---|
| CustomComponentId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The unique ID of the LightningComponentBundle or AuraDefinitionBundle component to be used in the Embedded Service.</p> |
| CustomComponentType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The embedded component type associated with the chosen <code>Feature</code> that you want to customize. The possible values are:</p> <ul style="list-style-type: none"> • <code>LA_ChatHeader</code>—Not supported for AuraDefinitionBundle components • <code>LA_Minimized</code> • <code>LA_PlainTextChatMessage</code>—Not supported for AuraDefinitionBundle components • <code>LA_Prechat</code> |

| Field | Details |
|-------------------------|---|
| EmbeddedServiceConfigId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The unique ID of the EmbeddedServiceConfig object that this custom component is associated with.</p> |
| Feature | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The Embedded Service feature that uses the custom component. The possible values are:</p> <ul style="list-style-type: none"> • Base • ChannelMenu • FieldService • Flows • LiveAgent • NotInUse |

Usage

Each Embedded Service feature has a defined set of components that can be customized. You can customize the feature using your own Lightning Web Components or Aura Components. Right now, you can only customize components of the Embedded Service Chat feature. For example, you can customize the prechat form, minimized state, chat bubble, and chat header of a Chat widget.

To customize a component, link the Lightning Web Component or Aura Component to an Embedded Service Custom Component object. Then link an Embedded Service Configuration to this object. The Embedded Service Configuration represents the Chat widget that you want to customize.

EmbeddedServiceCustomization

Represents a mapping between the EmbeddedServiceCustomization record parent and the EmbeddedServiceConfiguration or EmbeddedServiceMenuSettings, for a set of Embedded Service resources. Each resource is set of customizations applied via an uploaded static resource for your Embedded Chat. This object is available in API version 52.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|-------------------|--|
| CustomizationName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The name of the custom set of resources you create for your embedded component.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Used to describe a set of custom resources.</p> |
| ParentId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The ID of the EmbeddedServiceConfig or EmbeddedServiceMenuSettings parent record. This is a polymorphic relationship field.</p> <p>Relationship Name Parent</p> <p>Relationship Type Lookup</p> <p>Refers To EmbeddedServiceConfig, EmbeddedServiceMenuSettings</p> |

EmbeddedServiceCustomLabel

Represents a customized label that appears in the embedded component for a particular Embedded Service deployment. Labels can be customized for both Embedded Chat and embedded Appointment Management (beta). Available in API version 44.0 and later.

Supported Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETE, GET, POST, PUT, PATCH

Fields

| Field | Details |
|-------------------------|--|
| CustomLabel | <p>Type CustomLabel</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The developer name of the custom label that appears in the embedded component.</p> |
| CustomLabelId | <p>Type ID</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The label record ID for the custom label.</p> |
| EmbeddedServiceConfig | <p>Type EmbeddedServiceConfig</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The EmbeddedServiceConfig setup associated with the Embedded Service deployment.</p> |
| EmbeddedServiceConfigId | <p>Type ID</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description Unique ID for the Embedded Service deployment.</p> |
| LabelKey | <p>Type picklist</p> |

| Field | Details |
|-------|---|
| | Properties Create, Filter, Group, Restricted picklist, Sort, Update |
| | Description The type of label for this embedded component. The value corresponds to the label within a label group (substate of chat state or page type). |

EmbeddedServiceFieldService

Represents a setup node for creating an embedded Appointment Management (beta) deployment. Available in Tooling API version 43.0 and later.

Supported Calls


`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, POST, PATCH, DELETE

Fields

| Field | Details |
|----------------------------|---|
| AppointmentBookingFlowName | Type string |
| | Properties Filter, Group, Nillable, Sort |
| | Description Name of the appointment booking flow for this Embedded Service deployment. |
| CancelApptBookingFlowName | Type string |
| | Properties Filter, Group, Nillable, Sort |
| | Description Name of the appointment cancellation flow for this embedded Appointment Management (beta) deployment. |
| DeveloperName | Type string |

| Field | Details |
|----------------------------|--|
| | <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Unique name for the embedded Appointment Management configuration setup node.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| EmbeddedServiceConfigId | <p>Type EmbeddedServiceConfig</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Unique ID for the embedded Appointment Management (beta) deployment.</p> |
| Enabled | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Specifies whether Field Service is enabled for this Embedded Service deployment (<code>true</code>) or not (<code>false</code>).</p> |
| FieldServiceConfirmCardImg | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description URL of the image used for the confirmation card in embedded Appointment Management (beta).</p> |
| FieldServiceHomeImg | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description URL of the image used for the home screen in embedded Appointment Management (beta).</p> |
| FieldServiceLogoImg | <p>Type string</p> |

| Field | Details |
|----------|--|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description URL of the logo used for the home screen in embedded Appointment Management (beta).</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The unique name used for this Embedded Service deployment. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Languages supported in the Embedded Service deployment.</p> <ul style="list-style-type: none"> Chinese (Simplified): <code>zh_CN</code> Chinese (Traditional): <code>zh_TW</code> Danish: <code>da</code> Dutch: <code>nl_NL</code> English: <code>en_US</code> Finnish: <code>fi</code> French: <code>fr</code> German: <code>de</code> Italian: <code>it</code> Japanese: <code>ja</code> Korean: <code>ko</code> Norwegian: <code>no</code> Portuguese (Brazil): <code>pt_BR</code> Russian: <code>ru</code> Spanish: <code>es</code> |

| Field | Details |
|---------------------------|---|
| | <ul style="list-style-type: none"> Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: <code>sv</code> Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> <code>beta</code> <code>deleted</code> <code>deprecated</code> <code>deprecatedEditable</code> <code>installed</code> <code>installedEditable</code> <code>released</code> <code>unmanaged</code> |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Name of the Embedded Service deployment.</p> |
| Metadata | <p>Type <code>mns : EmbeddedServiceFieldService</code></p> <p>Properties Create, Nillable, Update</p> <p>Description The embedded Appointment Management (beta) metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| ModifyApptBookingFlowName | <p>Type string</p> |

| Field | Details |
|-------------------------------|---|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Name of the appointment modification flow for this embedded Appointment Management (beta) deployment.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |
| ShouldShowExistingAppointment | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Specifies whether to display a button on the home screen for customers to access their existing appointments (<code>true</code>) or not (<code>false</code>) for embedded Appointment Management (beta).</p> |
| ShouldShowNewAppointment | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Specifies whether to display a button on the home screen for customers to create a new appointment (<code>true</code>) or not (<code>false</code>) for embedded Appointment Management (beta).</p> |

EmbeddedServiceFlow

Represents a Flow Definition used by an Embedded Service deployment. This object is available in API version 45.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules

To access this type, you need the Customize Application user permission.

Fields

| Field | Details |
|-------------------------|--|
| EmbeddedServiceConfigId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The unique ID of EmbeddedServiceConfig (the Embedded Service deployment).</p> |
| Feature | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The Embedded Service feature that uses this flow. This is a read-only field. Possible values are:</p> <ul style="list-style-type: none">• <code>FieldService</code>• <code>Flows</code>• <code>LiveAgent</code> |
| Flow | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> |

| Field | Details |
|--------------------------|--|
| | <p>Description</p> <p>The flow definition name. Use one of the listed standard flows or an ID of a FlowDefinition that you created.</p> <p>Possible standard flow values are:</p> <ul style="list-style-type: none"> • <code>runtime_sales_see__SEE</code> • <code>setup_service_experience__Create_Case</code> • <code>setup_service_experience__Verify_Cust</code> |
| FlowType | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description</p> <p>The flow type used in a Flow (FL), Appointment Booking (FS), or Chat (LA) feature of Embedded Service.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • <code>FL_Flow</code> • <code>FS_CancelAppointment</code> • <code>FS_ModifyAppointment</code> • <code>FS_NewAppointment</code> • <code>LA_Survey</code> |
| IsAuthenticationRequired | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description</p> <p>Specifies whether authentication is required for this flow (<code>true</code>) or not (<code>false</code>). Authentication is required if the <code>FlowType</code> is an Appointment Booking type. Default is <code>false</code>.</p> |

Usage

The `EmbeddedServiceFlow` specifies which `FlowDefinitions` are used by the Embedded Service features Appointment Booking, Chat, and Flow. A [FlowDefinition](#) executes a [Flow](#) object. A `FlowDefinition` can have more than one version of a `Flow` object but only the active one is executed.

Only certain `ProcessType` values of the `Flow` object are supported depending on which `FlowType` you select in the `EmbeddedServiceFlow` object.

- Appointment Booking features, where the `FlowType` starts with "FS", only support `FieldServiceWeb` and `Appointments` values for `ProcessType`.

- Chat features, where the `FlowType` starts with "LA", only support the `Flow` value for `ProcessType`.
- Flow features, where the `FlowType` starts with "FL", only support the `Survey` value for `ProcessType`.

EmbeddedServiceFlowConfig

Represents whether an Embedded Service Flow feature is enabled or not. This object is available in API version 45.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

To access this type, you need the Customize Application user permission.

Fields

| Field | Details |
|-------------------------|---|
| EmbeddedServiceConfigId | Type reference Properties Filter, Group, Sort Description The unique ID of an EmbeddedServiceConfig (the Embedded Service deployment) that the flow config is associated with. |
| Enabled | Type boolean Properties Defaulted on create, Filter, Group, Sort Description Specifies whether the embedded flow is enabled (<code>true</code>) or not (<code>false</code>). Defaults to <code>false</code> . |
| FullName | Type string Properties Create, Group, Nillable |

| Field | Details |
|----------|---|
| | <p>Description</p> <p>The full name of the parent object EmbeddedServiceConfig in Metadata API. The full name can include a namespaceprefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Metadata | <p>Type</p> <p>EmbeddedServiceFlowConfig</p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>The embedded service flow config's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

Usage

To get a Flow feature working, you need three things: an [EmbeddedServiceConfig](#) deployment, an [EmbeddedServiceFlowConfig](#) record, and an [EmbeddedServiceFlow](#) record with the type set to `FL_Flow`. The [EmbeddedServiceFlowConfig](#) record controls whether the Flow feature associated with this deployment is enabled or disabled.

EmbeddedServiceLiveAgent

Represents a setup node for creating an Embedded Chat deployment. Available in Tooling API version 38.0 and later.

Supported Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`



Supported REST HTTP Methods

DELETE, GET, HEAD, PATCH, POST, PUT, Query

Special Access Rules

To access [EmbeddedServiceLiveAgent](#), your org must have Service Cloud with Chat enabled.

Fields

| Field | Details |
|-------------------------|---|
| AvatarImg | <p>Type url</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description URL of the image used as the agent avatar image. Available in API version 43.0 and later.</p> |
| CustomPrechatComponent | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Removed. The ID of the custom Lightning Component that's used for the pre-chat page in this embedded deployment. Available in API versions 38.0 to 45.0. Removed in API version 46.0 and later.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name for the EmbeddedServiceLiveAgent object.</p> <p>This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| EmbeddedServiceConfigId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description Unique name for the embedded chat deployment ID.</p> |

| Field | Details |
|---------------------|--|
| Enabled | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether this embedded chat deployment is enabled (<code>true</code>). Available in API version 43.0 and later.</p> |
| FontSize | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Font size for the chat window. Available in API version 43.0 and later. Possible values are:</p> <ul style="list-style-type: none">• <code>Small</code>• <code>Medium</code>• <code>Large</code> <p>Available in API version 43.0 and later.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The unique name used for this embedded chat deployment. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| HeaderBackgroundImg | <p>Type url</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Removed. URL of the image used for the header background in the embedded chat window. Available in API version 43.0. Removed in API version 49.0 and later.</p> |

| Field | Details |
|------------------------|---|
| IsOfflineCaseEnabled | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Specifies whether offline support is enabled for this embedded chat deployment (<code>true</code>) or not (<code>false</code>). Available in API version 43.0 and later.</p> |
| IsQueuePositionEnabled | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Specifies whether queue position (displaying the customer's place in line while they wait for an agent) is enabled for this embedded chat deployment (<code>true</code>) or not (<code>false</code>). Available in API version 43.0 and later.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Languages supported in the embedded chat deployment.</p> <ul style="list-style-type: none"> Chinese (Simplified): <code>zh_CN</code> Chinese (Traditional): <code>zh_TW</code> Danish: <code>da</code> Dutch: <code>n1_NL</code> English: <code>en_US</code> Finnish: <code>fi</code> French: <code>fr</code> German: <code>de</code> Italian: <code>it</code> Japanese: <code>ja</code> Korean: <code>ko</code> Norwegian: <code>no</code> Portuguese (Brazil): <code>pt_BR</code> Russian: <code>ru</code> Spanish: <code>es</code> Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations. |

| Field | Details |
|---------------------|---|
| | <ul style="list-style-type: none"> Swedish: sv Thai: ๓๓ The Salesforce user interface is fully translated to Thai, but Help is in English. |
| LiveAgentChatUrl | <p>Type url</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The REST endpoint for Chat. Available in API version 43.0 and later.</p> |
| LiveAgentContentUrl | <p>Type url</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The REST endpoint for Chat content. Available in API version 43.0 and later.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> beta deleted deprecated deprecatedEditable installed installedEditable released unmanaged <p>Available in API version 43.0 and later.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Name of the embedded chat deployment.</p> |

| Field | Details |
|--------------------------|---|
| Metadata | <p>Type mns : EmbeddedServiceLiveAgent</p> <p>Properties Create, Nillable, Update</p> <p>Description The embedded chat metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, NamespacePrefix is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, NamespacePrefix is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. <p>Available in API version 43.0 and later.</p> |
| OfflineCaseBackgroundImg | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description URL of the image used for the background for the offline support case form in an embedded chat window. Available in API version 43.0 and later.</p> |
| PrechatBackgroundImg | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field | Details |
|---------------------------|--|
| | Description URL of the image used for the background for the pre-chat form in an embedded chat window. Available in API version 43.0 and later. |
| PreChatEnabled | Type boolean Properties Defaulted on create, Filter, Group, Sort Description Indicates whether the pre-chat form is enabled for this embedded chat deployment. |
| PrechatJson | Type string Properties Nillable Description JSON object of all the fields of the selected pre-chat form in Chat setup. Available in API version 43.0 and later. |
| Scenario | Type picklist Properties Filter, Group, Restricted picklist, Sort Description The type of use case that is selected for the pre-chat form. Valid values are: <ul style="list-style-type: none"> Basic Sales Service |
| SmallCompanyLogoImg | Type url Properties Filter, Group, Nillable, Sort Description URL of the logo image used with embedded chat. Available in API version 43.0 and later. |
| WaitingStateBackgroundImg | Type url Properties Filter, Group, Nillable, Sort |

| Field | Details |
|-------|---|
| | Description URL of the image used for the background image in an embedded chat window while the customer waits to be connected with a support agent. Available in API version 43.0 and later. |

Usage

EmbeddedServiceLiveAgent represents a Chat configuration that is added to your web page. The EmbeddedServiceLiveAgent record contains a unique combination of a Chat button and the Chat deployment that the administrator selects during setup.

To create an EmbeddedServiceLiveAgent record, create a Chat Deployment, a Chat Button, and an EmbeddedServiceConfig record. Then, set the fields for these records as references on the EmbeddedServiceLiveAgent record.

EmbeddedServiceMenuItem

Represents the information needed to configure a Channel Menu item. This object is available in API version 47.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Special Access Rules

DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules

This type is available only if Salesforce Experiences and Salesforce Sites are enabled in your org. To access this type, you need the Customize Application user permission.

Fields

| Field | Details |
|-----------|--|
| ChannelId | Type reference Properties Create, Filter, Group, Nillable, Sort, Update Description The unique ID of an EmbeddedServiceConfig (the Embedded Service deployment) if ChannelType is one of the following. Otherwise, this field is null. <ul style="list-style-type: none"> EmbeddedServiceConfig |

| Field | Details |
|------------------------------------|--|
| | <ul style="list-style-type: none"> • <code>MessagingChannel</code> |
| <code>ChannelType</code> | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The channel the customer uses to contact your business. The possible values are:</p> <ul style="list-style-type: none"> • <code>CustomURL</code> • <code>EmbeddedServiceConfig</code> • <code>MessagingChannel</code> • <code>Phone</code> |
| <code>CustomUrl</code> | <p>Type url</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The custom URL of the menu item if <code>ChannelType</code> is <code>CustomURL</code>. Otherwise, this field is null.</p> |
| <code>DisplayOrder</code> | <p>Type int</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The order that the menu items are displayed in the UI. Only positive values are supported.</p> |
| <code>EmbeddedServiceMenuId</code> | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description Required. The unique ID of the parent record EmbeddedServiceMenuSettings.</p> |
| <code>IconUrl</code> | <p>Type url</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The URL of the icon used for the menu item.</p> |

| Field | Details |
|------------------------|---|
| IsDisplayedOnPageLoad | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Specifies whether the menu item is dynamically displayed (<code>true</code>) or hidden (<code>false</code>) during runtime. The default value is <code>false</code>.</p> |
| ItemName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The unique name used on the Setup for admins to identify the Channel Menu item. Conforms to the same properties as a developer name.</p> |
| OsOptionsHideInIOS | <p>Type boolean</p> <p>Properties Create, Filter, Update</p> <p>Description Specifies whether to hide the menu item on iOS platforms (<code>true</code>) or not (<code>false</code>).</p> |
| OsOptionsHideInLinuxOS | <p>Type boolean</p> <p>Properties Create, Filter, Update</p> <p>Description Specifies whether to hide the menu item on Linux platforms (<code>true</code>) or not (<code>false</code>).</p> |
| OsOptionsHideInMacOS | <p>Type boolean</p> <p>Properties Create, Filter, Update</p> <p>Description Specifies whether to hide the menu item on macOS platforms (<code>true</code>) or not (<code>false</code>).</p> |
| OsOptionsHideInOtherOS | <p>Type boolean</p> <p>Properties Create, Filter, Update</p> |

| Field | Details |
|--------------------------|---|
| | Description Specifies whether to hide the menu item on any other platforms not mentioned here (<code>true</code>) or not (<code>false</code>). |
| OsOptionsHideInWindowsOS | Type boolean Properties Create, Filter, Update Description Specifies whether to hide the menu item on Windows platforms (<code>true</code>) or not (<code>false</code>). |
| PhoneNumber | Type phone Properties Create, Filter, Group, Nillable, Sort, Update Description The phone number of menu items with <code>ChannelType</code> value <code>Phone</code> . Otherwise, the value is null. |
| ShouldOpenUrlInSameTab | Type boolean Properties Create, Defaulted on create, Filter, Group, Sort, Update Description Specifies whether a URL is opened in the same tab (<code>true</code>) or not (<code>false</code>). This field only applies for menu items with <code>ChannelType</code> value <code>CustomURL</code> . |

Usage

The `EmbeddedServiceMenuItem` object provides configuration information for a Channel Menu. A channel menu lists the ways in which customers can contact your business. A channel menu deployment is tied to a [EmbeddedServiceMenuSettings](#) record, which can have one or more `EmbeddedServiceMenuItem` objects associated with it.

EmbeddedServiceMenuSettings

Represents a setup node for creating a channel menu deployment. Channel menus list the ways in which customers can contact your business. This object is available in API version 47.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`



Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

This type is available only if Salesforce Experiences and Salesforce Sites are enabled in your org. To access this type, you need the Customize Application user permission.

Fields

| Field | Details |
|---------------|--|
| BrandingId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The developer name of the associated BrandingSet.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name for the embedded service menu settings.</p> <p>This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> |

| Field | Details |
|-----------|--|
| | <p>Description</p> <p>The full name of the associated EmbeddedServiceMenuSettings in Metadata API. The full name can include a namespaceprefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsEnabled | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>Specifies whether the channel menu is deployed (<code>true</code>) or not (<code>false</code>).</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The language of the embedded service menu. Possible values are:</p> <ul style="list-style-type: none"> • <code>ar</code>—Arabic • <code>da</code>—Danish • <code>de</code>—German • <code>en_US</code>—English • <code>es</code>—Spanish • <code>fi</code>—Finnish • <code>fr</code>—French • <code>iw</code>—Hebrew • <code>ja</code>—Japanese • <code>ko</code>—Korean • <code>nl_BE</code>—Dutch (Belgium) • <code>no</code>—Norwegian • <code>pt_BR</code>—Portuguese (Brazil) • <code>ru</code>—Russian • <code>sv</code>—Swedish • <code>th</code>—Thai • <code>ur</code>—Urdu • <code>zh_CN</code>—Chinese (Simplified) • <code>zh_TW</code>—Chinese (Traditional) |

| Field | Details |
|-----------------|--|
| ManageableState | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Label for the embedded service menu setting. In the UI, this field is Channel Menu Deployment Name.</p> |
| Metadata | <p>Type EmbeddedServiceMenuSettings</p> <p>Properties Create, Nillable, Update</p> <p>Description The EmbeddedServiceMenuSettings's metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> |

| Field | Details |
|-------|---|
| | <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |

Usage

An `EmbeddedServiceMenuSettings` record creates a channel menu. A channel menu lists the ways in which customers can contact your business. A channel is created using `EmbeddedServiceMenuItem` and is a child record of `EmbeddedServiceMenuSettings`. Here you can specify the Site name, BrandingSet name, and whether the channel menu is deployed or not. The Site field is not exposed in the Tooling API but you can edit it using the following Metadata block.

```
{
  "FullName" : "embeddedServiceMenuSettingsName",
  "Metadata" : {
    "branding" : "brandingSetRecordDevName",
    "isEnabled" : true,
    "masterLabel" : "embeddedServiceMenuSettingsName",
    "site" : "siteRecordDevName"
  }
}
```

EmbeddedServiceQuickAction

Returns a quick action that is associated with an `EmbeddedServiceLiveAgent` setup. The quick action includes the pre-chat form fields that the embedded chat window displays and shows the order in which the fields are displayed. Available in Tooling API version 39.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETE, GET, POST, PUT, PATCH

Fields

| Field | Details |
|----------------------------|---|
| EmbeddedServiceLiveAgentId | Type reference Properties Create, Filter, Group, Sort Description Reference to the embedded chat deployment. |
| Order | Type int Properties Create, Filter, Group, Sort, Update Description Order in which this quick action appears in the embedded chat pre-chat form. |
| QuickActionDefinitionId | Type reference Properties Create, Filter, Group, Sort, Update Description Reference to a quick action. |
| QuickActionType | Type picklist Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update Description Quick action type. One of the following values: <ul style="list-style-type: none">• Prechat-Pre-chat• OfflineCase-Offline support (Cases) Available in API version 43.0 and later. |

EmbeddedServiceResource

Represents a mapping from an EmbeddedServiceCustomization record parent to a set of resources. Each resource is a set of customizations applied via an uploaded static resource for your Embedded Chat. This object is available in API version 50.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|------------|--|
| ParentId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The ID of the EmbeddedServiceCustomization parent record. This is a relationship field.</p> <p>Relationship Name Parent</p> <p>Relationship Type Lookup</p> <p>Refers To EmbeddedServiceCustomization</p> |
| ResourceId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The ID of an uploaded static resource. This is a relationship field.</p> <p>Relationship Name Resource</p> <p>Relationship Type Lookup</p> <p>Refers To StaticResource</p> |

| Field | Details |
|--------------|---|
| ResourceType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The resource type to be customized. Possible values are:</p> <ul style="list-style-type: none"> • ChatInvitation • SettingsFile |

EnrichedField

Represents a field selected for Change Data Capture Enrichment for a channel and channel member. A non-empty enriched field is added to an update or delete change event even when not changed. Available in API version 51.0 and later.

Supported SOAP API Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`

Supported REST API HTTP Methods

DELETE, GET, HEAD, Query

Special Access Rules

- This object is part of Change Data Capture Enrichment.
- Use the EnrichedField object to query, retrieve, or delete enriched fields. Add an enriched field as part of PlatformEventChannelMember. For more information about Change Data Capture Enrichment and adding enriched fields, see [Enrich Change Events with Extra Fields When Subscribed with CometD](#) and [Example: Add Event Enrichment Fields with Tooling API](#) in the *Change Data Capture Developer Guide*.
- To retrieve or query this object, you must have the View Setup and Configuration permission.
- To delete this object, you must have the Customize Application permission.

Fields

| Field | Details |
|-----------------|----------------------------------|
| ChannelMemberId | <p>Type reference</p> |

| Field | Details |
|-----------------|---|
| | <p>Properties Create, Filter, Group, Sort</p> <p>Description The ID of the PlatformEventChannelMember that this field is part of. For example, if a field is added to the AccountChangeEvent, which is part of PlatformEventChannelMember, ChannelMemberId is the ID of the PlatformEventChannelMember record.</p> |
| Field | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description The name of the field to enrich change events with. For a list of supported field types, see Enrich Change Events with Extra Fields When Subscribed with CometD in the <i>Change Data Capture Developer Guide</i>.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |

Usage

To find out which channel members and fields you configured, query the EnrichedField object. For example, this query returns the channel member ID and the selected enriched field on that channel.


```
SELECT ChannelMemberId,Field FROM EnrichedField ORDER BY ChannelMemberId
```

In these query results, the rows returned are ordered by the channel member ID. The first two rows contain two enriched fields on the same channel: the Industry field and a custom field, whose value is an ID. The last row is for a different channel member and contains the Phone enriched field.


| ChannelMemberId | Field |
|--------------------|--------------------|
| 0v8RM00000000JsYAI | Industry |
| 0v8RM00000000JsYAI | 00NRM000001gEx32AE |
| 0v8RM00000000fiYAQ | Phone |

EntityDefinition

Provides row-based access to metadata about standard and custom objects.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.

This object is available in API version 32.0 and later.

 **Note:** EntityDefinition fields are exposed in SOAP API version 45.0 and later. You can use Tooling API to query for EntityDefinition fields in guest user mode in API version 44.0 and earlier. In API version 45.0 and later, use SOAP API to get this data in guest user mode. EntityDefinition is still exposed in Tooling API to User Profiles with the ViewSetup permission.

Supported SOAP Calls

`query()`, `search()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

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Fields

| Field | Details |
|--------------|--|
| ApexTriggers | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the Apex triggers associated with this object. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |

| Field | Details |
|--------------------|--|
| AssignmentRules | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents assignment rules that allow you to automatically route cases to the appropriate users or queues. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| AutoResponseRules | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the auto-response rules defined for the object. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| BusinessProcesses | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the business processes defined for the object. Business processes display different picklist values for users based on their profile and associated record type. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| ChildRelationships | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the child relationships defined for the object. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| CompactLayouts | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the compact layouts defined for the object. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |

| Field | Details |
|------------------------|--|
| CustomFields | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the custom fields defined for the object. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| DefaultCompactLayout | <p>Type CompactLayoutInfo</p> <p>Properties Create, Nillable, Update</p> <p>Description Metadata about the compact layout defined as the default for this object, if any.</p> |
| DefaultCompactLayoutId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the default compact layout, if any.</p> |
| DefaultImplementation | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Reserved for future use.</p> |
| DeploymentStatus | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Specifies the deployment status of the object. Controls whether a custom object and its associated custom tab, related lists, and reports are visible to non-admin users. This field is available in Tooling API version 37.0 and later. Valid values are:</p> <ul style="list-style-type: none"> • InDevelopment • Deployed |
| Description | <p>Type string</p> |

| Field | Details |
|-------------------|---|
| | <p>Properties Filter, Nillable, Sort</p> <p>Description The description of the object. A meaningful description makes it easier to distinguish between custom objects when they're viewed in a list. This field is available in Tooling API version 37.0 and later.</p> |
| DetailUrl | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description URL to the read-only detail page for this object. Corresponds to the <code>urlDetail</code> field in <code>DescribeObjectResult</code>. This field is available in Tooling API version 34.0 and later.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The developer's internal name for the custom object (for example <code>CF__c</code>).</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. Simplify queries by using this field instead of making multiple queries.</p> |
| EditDefinitionUrl | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description This field is available in Tooling API version 34.0 and later.</p> |
| EditUrl | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field | Details |
|-----------------------------------|---|
| | <p>Description</p> <p>The URL used when editing the custom object definition. Corresponds to the <code>urlEdit</code> field on <code>DescribeObjectResult</code>. This field is available in Tooling API version 34.0 and later.</p> |
| <code>ExtendedBy</code> | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Reserved for future use.</p> |
| <code>ExtendsInterfaces</code> | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Reserved for future use.</p> |
| <code>ExternalSharingModel</code> | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>The external sharing model. Possible values are:</p> <ul style="list-style-type: none"> • None • Read • Edit • ControlledByLeadOrContact • ControlledByCampaign <p>This field is available in Tooling API version 38.0 and later.</p> |
| <code>FieldSets</code> | <p>Type</p> <p>QueryResult</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Represents the field sets defined for the object. Because this field represents a relationship, use only in subqueries.</p> |
| <code>Fields</code> | <p>Type</p> <p>QueryResult</p> |

| Field | Details |
|---------------------|--|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the standard and custom fields defined for this object. Because this field represents a relationship, use only in subqueries.</p> |
| FormulaVariables | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the formulas that are built on this object. This field is available in Tooling API version 48.0 and later.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The name of the object. If a field, the name must specify the parent object, for example <code>Account.FirstName</code>. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| HelpSettingPageName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of the custom help setting page. This field is available in Tooling API version 34.0 and later.</p> |
| HelpSettingPageUrl | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The URL pointing to the custom help setting page for custom objects. This field is available in Tooling API version 34.0 and later.</p> |

| Field | Details |
|----------------------|--|
| ImplementedBy | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Reserved for future use.</p> |
| ImplementsInterfaces | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Reserved for future use.</p> |
| InternalSharingModel | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The internal sharing model. Possible values are:</p> <ul style="list-style-type: none"> • None • Read • Edit • ControlledByLeadOrContact • ControlledByCampaign <p>This field is available in Tooling API version 38.0 and later.</p> |
| IsActivityTrackable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, activities, such as tasks and scheduled calendar events associated with the custom object, can be tracked. Can be enabled only for custom objects. This field is available in Tooling API version 37.0 and later.</p> |
| IsApexTriggerable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> |

| Field | Details |
|---|---|
| | Description If <code>true</code> , Apex triggers can be defined for the object. |
| <code>IsAutoActivityCaptureEnabled</code> | Type boolean Properties Defaulted on create, Filter, Group, Sort Description If <code>true</code> , the object is enabled for Einstein Activity Capture. This field is available in Tooling API version 41.0 and later. |
| <code>IsCompactLayoutable</code> | Type boolean Properties Defaulted on create, Filter, Group, Sort Description If <code>true</code> , the object supports compact layouts. That is, compact layouts can be defined, a system compact layout can be synthesized, or both. |
| <code>IsCreatable</code> | Type boolean Properties Defaulted on create, Filter, Group, Sort Description If <code>true</code> , records based on the object (<code>true</code>) can be created. This field is unavailable starting with version 35.0. Use <code>IsCreatable</code> on <code>UserEntityAccess</code> instead. |
| <code>IsCustomSetting</code> | Type boolean Properties Defaulted on create, Filter, Group, Sort Description If <code>true</code> , the object is a custom setting. This field is available in Tooling API version 35.0 and later. |
| <code>IsCustomizable</code> | Type boolean Properties Defaulted on create, Filter, Group, Sort Description If <code>true</code> , custom fields can be defined for the object. |

| Field | Details |
|-----------------------|---|
| IsDeletable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the object can be deleted. This field is unavailable starting with version 35.0. Use <code>IsDeletable</code> on <code>UserEntityAccess</code> instead.</p> |
| IsDeprecatedAndHidden | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, this object is unavailable for the current version. This field is available in Tooling API version 35.0 and later.</p> |
| IsEverCreatable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the object can be created using an API, assuming the current user has the appropriate permissions. If false, the application server manages the object and no user can create it. This field is available in Tooling API version 35.0 and later.</p> |
| IsEverDeletable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the object can be created using an API, assuming the current user has the appropriate permissions. If false, the application server manages the object and no user can delete it. This field is available in Tooling API version 35.0 and later.</p> |
| IsEverUpdatable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> |

| Field | Details |
|------------------------------------|---|
| | <p>Description</p> <p>If <code>true</code>, the object can be created using an API, assuming the current user has the appropriate permissions. If <code>false</code>, the application server manages the object and no user can modify it. This field is available in Tooling API version 35.0 and later.</p> |
| <code>IsFeedEnabled</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the Chatter feed is enabled for this object. This field is available in Tooling API version 34.0 and later.</p> |
| <code>IsFieldHistoryTracked</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, your org can track changes to fields on the custom object records. History data is available for reporting, so users can easily create audit trail reports. Can be enabled only for custom objects. This field is available in Tooling API version 37.0 and later.</p> |
| <code>IsFlsEnabled</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, you can set field-level security on applicable fields. This field is available in Tooling API version 35.0 and later.</p> |
| <code>IsIdEnabled</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, you can include <code>Id</code> in the <code>SELECT</code> clause of a query on this object. This field is available in Tooling API version 35.0 and later.</p> <p>For example, assume that there's an object backed by an OData data source with the High Data Volume option selected. That object's <code>IsIdEnabled</code> field is <code>false</code>.</p> |
| <code>IsInterface</code> | <p>Type</p> <p>boolean</p> |

| Field | Details |
|--------------------|--|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Reserved for future use.</p> |
| IsLayoutable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, layouts can be defined for the object. This field is available in Tooling API version 35.0 and later.</p> |
| IsMruEnabled | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, Most Recently Used (MRU) list functionality is enabled for this object. This field is available in Tooling API version 37.0 and later.</p> |
| IsQueryable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the object can be queried.</p> |
| IsReplicableable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the object can be replicated. This field is available in Tooling API version 35.0 and later.</p> |
| IsReportingEnabled | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the data in the custom object's records is available for reporting. Can be enabled only on custom objects. This field is available in Tooling API version 37.0 and later.</p> |

| Field | Details |
|--------------------|---|
| IsRetrieveable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the object can be retrieved. This field is available in Tooling API version 35.0 and later.</p> |
| IsSearchable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, records of this object are indexed for search. This field is available in Tooling API version 35.0 and later.</p> |
| IsSearchLayoutable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, you can customize search layouts for this object. This field is available in Tooling API version 35.0 and later.</p> |
| IsTriggerable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, you can use triggers with this object. This field is available in Tooling API version 35.0 and later.</p> |
| IsWorkflowEnabled | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, workflow rules can be defined for the object.</p> |
| KeyPrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field | Details |
|---------------|---|
| | Description The first three digits of the object's ID, which identify the object type, such as Account or Opportunity. |
| Label | Type string Properties Filter, Group, Nillable, Sort Description The label for this object, used in the compact layout and in the user's language locale. |
| Layouts | Type QueryResult Properties Filter, Group, Nillable, Sort Description Represents the layouts defined for this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries. |
| Limits | Type QueryResult Properties Filter, Group, Nillable, Sort Description The limits defined for this object. Corresponds to the Limits page for each standard object in Setup, or the Limits related list for each custom object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries. |
| LookupFilters | Type QueryResult Properties Filter, Group, Nillable, Sort Description Represents the lookup filters defined for this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries. |
| MasterLabel | Type string Properties Filter, Group, Sort |

| Field | Details |
|-----------------|---|
| | <p>Description</p> <p>The label for this object, which displays in Setup. The master label is in the default language locale for the organization. If there's no default language locale, the label is in <code>en_US</code>.</p> |
| Metadata | <p>Type</p> <p><code>mns : CustomObject</code></p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>Metadata about the standard or custom object. Details are available in the CustomObject entry in the metadata namespace in the Tooling API WSDL.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There's an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that aren't Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There's no namespace prefix for all other objects. |
| NewUrl | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The URL used when editing a new standard or custom record. Corresponds to the <code>urlNew</code> field on <code>DescribeSobjectResult</code>. This field is available in Tooling API version 34.0 and later.</p> |

| Field | Details |
|--------------------|---|
| OwnerChangeOptions | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Use only in subqueries. This field is available in Tooling API version 35.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| Particles | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The particles defined for this object. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| PluralLabel | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The plural version of the object's <code>Label</code>.</p> |
| Publisher | <p>Type Publisher</p> <p>Properties Create, Nillable, Update</p> <p>Description The publisher of this object, for example Salesforce, a user, or a package name. This field is available in Tooling API version 34.0 and later.</p> |
| PublisherId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the publisher associated with this object. This field is available in Tooling API version 34.0 and later.</p> |
| QualifiedApiName | <p>Type string</p> |

| Field | Details |
|------------------------|---|
| | <p>Properties Filter, Group, Sort</p> <p>Description A unique external ID for the object of the form <code>NamespacePrefix__DeveloperName</code> for standard objects and <code>NamespacePrefix__DeveloperName__c</code> for custom objects. When performing SOQL queries with Custom Metadata Type relationship fields, use this field to obtain fully qualified namespaces.</p> |
| QuickActionDefinitions | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the quick actions defined for this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| RecordTypes | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the record types defined for this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| RecordTypesSupported | <p>Type RecordTypesSupported on page 307</p> <p>Properties Nillable</p> <p>Description Represents the record types defined for this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later.</p> |
| RelatedListDefinitions | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents related lists defined for this object. Because this field represents a relationship, use only in subqueries. Available in API version 55.0 and later.</p> |

| Field | Details |
|---------------------------|--|
| RelationshipDomains | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Metadata about the relationships with other objects that this object has. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| RunningUserEntityAccess | <p>Type UserEntityAccess</p> <p>Properties Create, Nillable, Update</p> <p>Description Represents the running user's access to this object. This field is available in Tooling API version 34.0 and later.</p> |
| RunningUserEntityAccessId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the UserEntityAccess record associated with this object. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| SearchLayouts | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the search layouts associated with this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| StandardActions | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the standard actions defined for this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |

| Field | Details |
|--------------------------|--|
| ValidationRules | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the validation rules defined for this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| WebLinks | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the Weblinks associated with this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| WorkflowAlerts | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the workflow alerts associated with this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| WorkflowFieldUpdates | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the workflow field updates for this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries.</p> |
| WorkflowOutboundMessages | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field | Details |
|---------------|---|
| | Description Represents the workflow outbound messages associated with this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries. |
| WorkflowTasks | Type QueryResult Properties Filter, Group, Nillable, Sort Description Represents the workflow tasks associated with this object. Use only in subqueries. This field is available in Tooling API version 34.0 and later. Because this field represents a relationship, use only in subqueries. |

RecordTypesSupported Metadata

`RecordTypesSupported` is in the `tns` namespace. Represents the record types associated with this object.

| Field | Details |
|---------------------|--|
| recordTypeInfoInfos | Type RecordTypeInfo Description Represents the <code>RecordTypeInfo</code> records for the object. Use only in subqueries. This field is available in Tooling API version 35.0 and later. |

RecordTypeInfo Metadata

`RecordTypeInfo` is in the `tns` namespace. Represents a record type associated with the object.

| Field | Details |
|--------------------------|--|
| available | Type boolean Description If <code>true</code> , this record type is available for use. This field is available in Tooling API version 35.0 and later. |
| defaultRecordTypeMapping | Type boolean Description This field is available in Tooling API version 35.0 and later. |

| Field | Details |
|---------------|--|
| developerName | Type string Description The developer name of the record type. This field is available in API version 43.0 and later. |
| master | Type boolean Description This field is available in Tooling API version 35.0 and later. |
| name | Type string Description Name of the record type. This field is available in Tooling API version 35.0 and later. |
| recordTypeId | Type Id Description ID of the record type. This field is available in Tooling API version 35.0 and later. |

EntityLimit

Represents the limits for an object as displayed in the Setup UI.

This object is available in API version 34.0 and later.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Limitations

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Fields

| Field | Details |
|--------------------|--|
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. Use this field to simplify queries.</p> |
| EntityDefinition | <p>Type EntityDefinition</p> <p>Properties Filter, Group, Sort</p> <p>Description The object to which these limits apply.</p> |
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description ID of the object to which these limits apply.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The label of the object to which these limits apply.</p> |
| Max | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description The maximum number of objects that the organization is allowed to have.</p> |
| Remaining | <p>Type int</p> <p>Properties Filter, Group, Sort</p> |

| Field | Details |
|-------|---|
| | Description The number of objects still available. For example, if the limit on custom objects is 100, and you create 75, this value is 25. |
| Type | Type string Properties Filter, Group, Restricted picklist, Sort Description What type of component the limit applies to: <ul style="list-style-type: none"> • <code>ActiveLookupFilters</code> • <code>ActiveRules</code> • <code>ActiveValidationRules</code> • <code>ApprovalProcesses</code> • <code>CbsSharingRules</code> • <code>CustomFields</code> • <code>CustomRelationship</code> • <code>RollupSummary</code> • <code>SharingRules</code> • <code>TotalRules</code> • <code>VLookup</code> |

EntityParticle

Represents each element of a field that can be presented in a user interface. Contrast `EntityParticle` with `FieldDefinition`, which represents each element of a field defined in the Metadata API. `EntityParticle` has parity with `describe`, which returns API accessible fields only for an entity. Available in Tooling API version 34.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#)

[SOSL Limitations](#)

Fields

| Field | Details |
|---------------------|---|
| ByteLength | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The maximum length of the field represented by this EntityParticle, in bytes.</p> |
| DataType | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Data type of the field, for example <code>textarea</code> or <code>datetime</code>. The values are defined similar to the values in the user interface, not the corresponding API data type names. For example, from an object, retrieve all the fields of one data type.</p> <pre>SELECT DataType, QualifiedApiName FROM EntityParticle WHERE DataType = 'phone' AND EntityDefinition.QualifiedApiName = 'Account'</pre> |
| DefaultValueFormula | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The default value specified for the field when a formula isn't specified. If no default value is specified, this field isn't returned.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include</p> |

| Field | Details |
|--------------------|--|
| | spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's org. Label is Record Type Name . |
| Digits | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Maximum number of digits for a field of type int. If an integer value exceeds the number of digits, the API returns an error.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID for the object defined in the <code>DurableId</code> field.</p> |
| ExtraTypeInfo | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents further definition of a type.</p> <ul style="list-style-type: none"> For type textarea: <ul style="list-style-type: none"> plaintextarea richtextarea For type URL: <ul style="list-style-type: none"> image For type reference: <ul style="list-style-type: none"> externallookup |

| Field | Details |
|-------------------|--|
| | <ul style="list-style-type: none"> - indirectlookup • For Account: <ul style="list-style-type: none"> - switchablepersonname - personname |
| FieldDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the field definition associated with this EntityParticle.</p> |
| InlineHelpText | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the content of field-level help. Available in Tooling API starting version 35.0.</p> |
| IsApiFilterable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field represented by this EntityParticle can be specified in the <code>WHERE</code> clause of a query string.</p> <p>Restrictions You can't sort or filter compound fields. This field's value is always <code>false</code> for compound fields.</p> |
| IsApiGroupable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field represented by this EntityParticle can be included in the <code>GROUP BY</code> clause of a SOQL query.</p> |
| IsApiSortable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> |

| Field | Details |
|---------------------|---|
| | <p>Description If <code>true</code>, a query can sort on the field represented by this EntityParticle.</p> <p>Restrictions You can't sort or filter compound fields. This field's value is always <code>false</code> for compound fields.</p> |
| IsAutoNumber | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field's value is assigned when the record is created. Available in Tooling API starting version 35.0.</p> |
| IsCalculated | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field represented by this EntityParticle is calculated.</p> |
| IsCaseSensitive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field represented by this EntityParticle is case sensitive. Available in Tooling API starting version 35.0.</p> |
| IsCompactLayoutable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field can be included in a compact layout.</p> |
| IsComponent | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field is a component of a compound field. The default value is <code>false</code>. Available in Tooling API starting version 40.0.</p> |

| Field | Details |
|----------------------------|--|
| IsCompound | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field is a compound of other fields. The default value is <code>false</code>. Available in Tooling API starting version 38.0.</p> |
| IsCreatable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, a value for the field represented by this EntityParticle can be created. Available in Tooling API starting version 35.0.</p> |
| IsDefaultedOnCreate | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, and if no other value is supplied, a default value is applied when the record is created. Available in Tooling API starting version 35.0.</p> |
| IsDependentPicklist | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field is a dependent picklist. Available in Tooling API starting version 35.0.</p> |
| IsDeprecatedAndHidden | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Reserved for future use.</p> |
| IsDisplayLocationInDecimal | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> |

| Field | Details |
|-----------------------|---|
| | <p>Description</p> <p>If <code>true</code>, and if the field represented by this EntityParticle is a Geolocation custom field, the value appears in decimal notation. If <code>false</code>, the value appears as degrees, minutes, and seconds. Available in Tooling API starting version 35.0.</p> <p>Restrictions</p> <p>This field has no effect on custom fields that aren't Geolocation fields.</p> |
| IsEncrypted | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the field is marked for Classic Encryption. Available in Tooling API starting version 35.0.</p> |
| IsFieldHistoryTracked | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the field's history can be tracked.</p> |
| IsHighScaleNumber | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>Indicates whether the field stores numbers to eight decimal places regardless of what's specified in the field details (<code>true</code>) or not (<code>false</code>). Used to handle currencies for products that cost fractions of a cent, in large quantities. If high-scale unit pricing isn't enabled in your org, this field isn't returned.</p> |
| IsHTMLFormatted | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the field contains HTML.</p> |
| IsIdLookup | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> |

| Field | Details |
|-------------------------------|---|
| | <p>Description</p> <p>If <code>true</code>, you can use the field to specify a record for upsert. Available in Tooling API starting version 35.0.</p> |
| <code>IsLayoutable</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the field can be assigned to a layout. Available in Tooling API starting version 35.0.</p> |
| <code>IsListVisible</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the field can be included in a related list.</p> |
| <code>IsNameField</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the field is a name field.</p> |
| <code>IsNamePointing</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the field represents a polymorphic relationship. Determine the object type at runtime for dynamic queries when this value is <code>true</code>. Available in Tooling API starting version 35.0.</p> |
| <code>IsNillable</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the field can be left out of queries on the object.</p> |
| <code>IsPermissionable</code> | <p>Type</p> <p>boolean</p> |

| Field | Details |
|---------------------------|--|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, you can specify field permissions for the field. Available in Tooling API starting version 35.0.</p> |
| IsUnique | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field is unique. Available in Tooling API starting version 35.0.</p> |
| IsUpdatable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, you can update the field. Available in Tooling API starting version 35.0.</p> |
| IsWorkflowFilterable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field can be filtered for a workflow.</p> |
| IsWriteRequiresMasterRead | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, writing to the detail object requires read sharing instead of read-write sharing of the parent. Available in Tooling API starting version 35.0.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The label that corresponds to the field in the user interface. If the label has translations, the label returned is in the user's language.</p> |

| Field | Details |
|-----------------|--|
| Length | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description The maximum number of bytes available to store the value in the field represented by this EntityParticle.</p> |
| Mask | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Reserved for future use.</p> |
| MaskType | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Reserved for future use.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Primary label for this object. This display value is the internal label that isn't translated. Limit: 40 characters.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Name of the object for the field represented by this EntityParticle. This field is available in API version 35.0 and later.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Sort</p> |

| Field | Details |
|----------------------|--|
| | <p>Description</p> <p>The namespace prefix associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of these values:</p> <ul style="list-style-type: none"> • In a Developer Edition org, the namespace prefix is set to the namespace prefix of the org for all objects that support it. There's an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In an org other than a Developer Edition org, <i>NamespacePrefix</i> is only set for objects that are part of an installed managed package. There's no namespace prefix for all other objects. |
| Precision | <p>Type</p> <p>int</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>The maximum number of digits allowed for the field represented by this EntityParticle.</p> |
| QualifiedApiName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>A unique external name for the field.</p> |
| ReferenceTargetField | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Specifies the custom field on the parent object to match against this indirect lookup relationship field, whose values come from an external data source. The specified custom field on the parent object must have both <i>IsIdLookup</i> and <i>IsUnique</i> set to <i>true</i>. This field is available in API version 35.0 and later.</p> <p>Restrictions</p> <p>Available only if the field represented by this EntityParticle is an indirect lookup relationship field on an external object.</p> |

| Field | Details |
|-------------------|---|
| ReferenceTo | <p>Type RelationshipReferenceTo on page 322</p> <p>Properties Nillable</p> <p>Description The array of values in this field represents the possible object types of the referenced objects. For example, if EntityParticle represents a field on Events, the values are <code>Contact</code>, <code>Lead</code>, and custom objects with a relationship to Events.</p> |
| RelationshipName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description If the field represented by this EntityParticle is a master-detail relationship field, this field's value is the relationship name.</p> |
| RelationshipOrder | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description A value of 0 represents a primary relationship, and a value of 1 represents a secondary relationship. This field is relevant only for relationship fields.</p> |
| Scale | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description The number of digits to the right of the decimal in an integer. For example, 3.00 has a scale of 2.</p> |
| ValueTypeId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the value type, if any, for the field represented by this EntityParticle.</p> |



Note: EntityParticle fields are exposed in SOAP API version 45.0 and later. You can use Tooling API to query for EntityParticle fields in guest user mode in API version 44.0 and earlier. In API version 45.0 and later, use SOAP API to get this data in guest user mode. EntityParticle is still exposed in Tooling API to User Profiles with the ViewSetup permission.

RelationshipReferenceTo Type

Represents the set of objects that this EntityParticle can have a relationship with.

| Field | Type | Details |
|-------------|----------|--|
| referenceTo | string[] | The name of an object that can be referenced. For example, if EntityParticle represents Event.WhoId (the whoId field on Event), the value of this field would be at least [Contact, Lead]. |

Usage

When querying or searching the EntityParticle object, you must filter using this syntax: `WHERE EntityDefinition.QualifiedApiName = '[ObjectApiName]'`

Example Query:

```
SELECT EntityDefinitionId, QualifiedApiName, FieldDefinitionId
FROM EntityParticle
WHERE EntityDefinition.QualifiedApiName = 'Case'
```

Example Query: Retrieve All Account Fields

```
SELECT DataType, FieldDefinition.QualifiedApiName
FROM EntityParticle
WHERE EntityDefinition.QualifiedApiName = 'Account'
```

Example Query: Find Parent Object Types

Some fields can have more than one type of object in a relationship (polymorphic). For example, Task and Event can have relationships with Contact or Lead.

Use this query to retrieve a list of objects that can have a relationship with Event.WhoId (represented by EntityParticle).

```
SELECT QualifiedApiName, RelationshipName, ReferenceTo, ReferenceTargetField
FROM EntityParticle
WHERE EntityDefinition.QualifiedApiName = 'Event' AND QualifiedApiName = 'WhoId'
```

EventDelivery

Represents how an event instant maps to a target payload. Removed in API version 46.0. Available in API version 41.0 to 45.0.


Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, POST, PUT, PATCH, HEAD

Fields

| Field | Details |
|---------------------|--|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The developer's internal name for the event delivery used in the API.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| EventSubscriptionId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. The ID of the subscription to deliver the data to.</p> |
| FullName | <p>Type string</p> <p>Properties Create, GroupGroup, Nillable</p> <p>Description The unique name used as the event delivery identifier for API access. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, GroupGroup, Nillable, Restricted picklist, Sort,</p> <p>Description The language of the <code>MasterLabel</code>.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> |

| Field | Details |
|-----------------|---|
| | <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Master label for the event delivery. This internal label doesn't get translated.</p> |
| Metadata | <p>Type mns:EventDelivery</p> <p>Properties Create, Nillable, Update</p> <p>Description The event delivery's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> |

| Field | Details |
|---------------|---|
| | <ul style="list-style-type: none"> In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |
| ReferenceData | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description User-defined non-unique identifier.</p> |
| Type | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Required. Determines what action occurs when the event is delivered to the listeners on behalf of the subscribers.</p> <p>Valid values are:</p> <ul style="list-style-type: none"> <code>StartFlow</code>—When the event occurs, it's delivered to a flow of type <code>CustomEvent</code>. Those flows are built through Process Builder. <code>ResumeFlow</code>—Reserved for future use. |

EventRelayConfig

Represents the configuration of an event relay, which relays platform events and change data capture events from Salesforce to Amazon EventBridge. This object is available in API version 56.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`


Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules

- To retrieve or query this object, you must have the View Setup and Configuration permission.
- To create, update, or delete this object, you must have the Customize Application permission.
- You can update only the `state` and `relayOption` fields and not `eventChannel` or `destinationResourceName`. Update the `state` and `relayOption` fields through the `Metadata` field.

Fields

| Field | Details |
|-------------------------|--|
| DestinationResourceName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The developer name of the named credential, which stores the AWS account information. The <code>destinationResourceName</code> value contains the <code>callout:</code> prefix. For example: <code>callout:MyRelayNamedCredential</code></p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> |
| EventChannel | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> |

| Field | Details |
|----------|--|
| | <p>Description</p> <p>The full name of the event channel used in the event relay. For example: MyRelayChannel__chn</p> |
| FullName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Group, Nillable</p> <p>Description</p> <p>The full name of the associated EventRelayConfig in Metadata API. The full name can include a namespace prefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The language of the EventRelayConfig.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • da—Danish • de—German • en_US—English • es—Spanish • es_MX—Spanish (Mexico) • fi—Finnish • fr—French • it—Italian • ja—Japanese • ko—Korean • nl_NL—Dutch • no—Norwegian • pt_BR—Portuguese (Brazil) • ru—Russian • sv—Swedish • th—Thai • zh_CN—Chinese (Simplified) • zh_TW—Chinese (Traditional) |

| Field | Details |
|-----------------|--|
| ManageableState | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The label for the event relay, which corresponds to the label of the EventRelayConfig metadata type. The label is displayed in the user interface.</p> <p>If the label isn't provided in the metadata type, MasterLabel is the DeveloperName value.</p> |
| Metadata | <p>Type EventRelayConfig</p> <p>Properties Create, Nillable, Update</p> <p>Description The EventRelayConfig's metadata.</p> |
| NamespacePrefix | <p>Type string</p> |

| Field | Details |
|-------------|---|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| RelayOption | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description A JSON-encoded string that contains an option for resuming an event relay after the system recovers from an error. This option is used if the event relay can't resume after the last relayed event. The options available are:</p> <ul style="list-style-type: none"> • <code>{"ReplayRecovery\":\"LATEST\"}</code>—(Default) Start relaying events from new events received in the event bus. Use this option if you aren't interested in missed events while the relay was down. • <code>{"ReplayRecovery\":\"EARLIEST\"}</code>—Resend all events stored in the event bus and relay new events thereafter. The event bus stores events for up to three days. Use this option if you want to reprocess all stored events and catch up on missed events. |
| State | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The execution state of the event relay. Possible values are:</p> <ul style="list-style-type: none"> • <code>RUN</code>—The event relay is running and actively relaying event messages from Salesforce to Amazon EventBridge. • <code>PAUSE</code>—An administrator paused the event relay. No events are relayed to Amazon EventBridge during this status. All current state information is saved. |

| Field | Details |
|-----------|---|
| | <ul style="list-style-type: none"> • STOP—(Default) The event relay is stopped and no events are relayed to Amazon EventBridge. All current state information is deleted. |
| UsageType | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Reserved for future use.</p> |

Usage

This JSON example is the body of a REST API POST request that creates an event relay named `MyEventRelay`. It includes the optional fields `relayOption` and `state`. The corresponding REST endpoint is `/services/data/v59.0/tooling/subjects/EventRelayConfig`.

```
{
  "FullName": "Carbon_Comparison_Relay",
  "Metadata": {
    "destinationResourceName": "callout:AWS_Account",
    "eventChannel": "Carbon_Comparison_Channel__chn",
    "label": "Carbon Comparison Relay",
    "relayOption": "{ \"ReplayRecovery\": \"LATEST\" }",
    "state": "STOP"
  }
}
```

EventSubscription

Represents a subscription to an event type. Removed in API version 46.0. Available in API version 41.0 to 45.0.


Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, POST, PUT, PATCH, HEAD

Fields

| Field | Details |
|---------------|---|
| Active | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If the subscription isn't active, it never receives any events.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The developer's internal name for the event delivery used in the API.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| EventType | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The type of event to subscribe to. Valid values are:</p> <ul style="list-style-type: none"> • <code>AlarmEvent</code>—An alarm that's offset from an absolute time (supported only if the <code>EventDelivery</code> type is <code>ResumeFlow</code>) • <code>CustomEvent</code>—Reserved for future use • <code>DateRefAlarmEvent</code>—An alarm that's offset from a date/time field value (supported only if the <code>EventDelivery</code> type is <code>ResumeFlow</code>) • <code>EventObject</code>—A custom platform event • <code>StandardPlatformEvent</code>—A standard platform event |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The unique name used as the event delivery identifier for API access. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> |

| Field | Details |
|-----------------|---|
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the <code>MasterLabel</code>.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Master label for the event subscription. This internal label doesn't get translated.</p> |
| Metadata | <p>Type mns:EventSubscription</p> <p>Properties Create, Nillable, Update</p> <p>Description The event subscription's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> |

| Field | Details |
|---------------|---|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |
| ReferenceData | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description If the subscriber is a flow of type CustomEvent, <code>referenceData</code> is <code>flowName_versionNumber</code>. For example, <code>Printer_Management_2</code>.</p> |

ExternalClientAppSettings

For internal use only.

ExternalCredential

Represents the details of how Salesforce authenticates to the external system. This object is available in API version 56.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.



Note: All credentials stored within this entity are encrypted under a framework that is consistent with other encryption frameworks on the platform. Salesforce encrypts your credentials by auto-creating org-specific keys. Credentials encrypted using the previous encryption scheme have been migrated to the new framework.

Supported SOAP API Calls



`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`


Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|------------------------|---|
| AuthenticationProtocol | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Required.</p> <p>The authentication protocol that's required to access the external system. Values are:</p> <ul style="list-style-type: none"> • <code>AwsSv4</code> — AWS Signature Version 4 • <code>Custom</code> — User-created authentication. Specify the permission set, sequence number, and authentication parameters. Each authentication parameter requires a name and value. • <code>Jwt</code> — Reserved for future use • <code>JwtExchange</code> — Reserved for future use • <code>NoAuthentication</code> — Reserved for future use • <code>Oauth</code> — Oauth 2.0 • <code>Password</code> — Reserved for future use <p>For connections to Amazon Web Services using Signature Version 4, use <code>AwsSv4</code>.</p> <p>For connections using a direct token system, use <code>Jwt</code>. If using an intermediary authorization provider to process JWTs and return access tokens, use <code>JwtExchange</code>.</p> <p>For Simple URL data sources, select <code>NoAuthentication</code>.</p> <p>For cloud-based Files Connect external systems, select <code>Oauth</code>. For on-premises systems, select <code>Password</code>.</p> |
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description A meaningful description of the external credential.</p> |

| Field | Details |
|------------------------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name for the external credential object.</p> <p>The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow while Salesforce generates one for each record.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| ExternalCredentialParameters | <p>Type ExternalCredentialParameter[]</p> <p>Properties Nillable</p> <p>Description One or more sets of parameters that further configure the external credential.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of ExternalCredential in Metadata API. The full name can include a namespace prefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> |

| Field | Details |
|-----------------|---|
| | Description The language of the external credential. |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort Description Indicates the manageable state of the specified component that is contained in a package: <ul style="list-style-type: none">• beta• deleted• deprecated• deprecatedEditable• installed• installedEditable• released• unmanaged |
| MasterLabel | Type string Properties Filter, Group, Sort Description  Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations. The main label for the external credential. In the UI, this field is Label . |
| Metadata | Type ExternalCredential Properties Create, Nillable, Update Description The external credential's metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |
| NamespacePrefix | Type string |

| Field | Details |
|-------|---|
| | <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> |

ExternalCredentialParameter

Represents the parameters that configure an external credential. External credential parameters are used to configure external credential callouts through a combination of the type, name, and value/lookup fields. Available in API version 56.0 and later.

These parameters are used internally to provide a flexible architecture and are exposed here for packaging reasons.

| Field | Description |
|----------------|--|
| AuthProvider | <p>Type</p> <p>string</p> <p>Description</p> <p>Reference to an authentication provider that the <code>AuthProvider</code> component represents, which defines the service that provides the login process and approves access to the external system.</p> |
| Certificate | <p>Type</p> <p>string</p> <p>Description</p> <p>If the value of the <code>ParameterType</code> field is <code>SigningCertificate</code>, then this field references the certificate.</p> |
| Description | <p>Type</p> <p>string</p> <p>Description</p> <p>A human readable description of this external credential parameter.</p> |
| ParameterGroup | <p>Type</p> <p>string</p> <p>Description</p> <p>Groups a parameter along with its respective principal. For example, with dynamic scopes the user can apply a scope <code>AuthParameter</code> only when authenticated against a specific principal with a matching <code>ParameterGroup</code> value.</p> |

| Field | Description |
|----------------------------|---|
| | <p>If a value for <code>ParameterGroup</code> isn't provided, <code>ParameterGroup</code> defaults to the <code>ParameterName</code> value for <code>PER_USER</code> and <code>NAMED_PRINCIPAL</code>. For all other parameters <code>ParameterGroup</code> defaults to <code>DEFAULT_GROUP</code>.</p> |
| <code>ParameterName</code> | <p>Type string</p> <p>Description Required. The name of the external credential parameter.</p> |
| <code>ParameterType</code> | <p>Type <code>ExternalCredentialParamType</code> (enumeration of type string)</p> <p>Description Required. The type of external credential parameter. The value of this field drives the behavior of the parameter. Values are:</p> <ul style="list-style-type: none"> • AuthHeader: Allows the user to specify custom authentication headers to be added to the callout at run time. When using <code>AuthHeader</code>, the <code>ParameterName</code> field must be the header name as a string, and <code>ParameterValue</code> must be a formula of a header value that is evaluated at run time. <code>SequenceNumber</code> determines the order in which headers are sent out in the callout. Headers with lower numbers are sent out first. • AuthParameter: Allows users to add additional authentication settings. <code>ParameterName</code> defines the parameter to set. For example, <code>AwsRegion</code> sets the AWS Region parameter to apply for an AWS Signature V4 authentication protocol and <code>ParameterValue</code> is value for the AWS Region. • AuthProtocolVariant: Used to specify a variant of an authentication protocol. For example, <code>AwsSts</code> as a variant when the <code>ParameterName</code> is <code>AwsSv4</code> and the <code>ParameterValue</code> is <code>AwsSv4_STS</code>. • AuthProvider: Specifies that this parameter configures an authentication provider referenced by the <code>AuthProvider</code> field. • AuthProviderUrl: Specifies the authentication endpoint URL. For example, if the authentication type is OAuth with JWT Bearer Flow, then <code>ParameterValue</code> is an authentication token endpoint. • AuthProviderUrlQueryParameter: Allows the user to specify custom query parameters to be added to the callout to the authentication provider at run time. Currently, supported only for AWS Signature V4 with STS. The allowed <code>AuthProviderUrlQueryParameter</code> values are <code>AwsExternalId</code> and <code>AwsDuration</code>, used with AWS STS. |

| Field | Description |
|-----------------------------|---|
| | <ul style="list-style-type: none"> • <code>AwsStsPrincipal</code>: Configures AWS Signature V4 along with STS. <code>ParameterName</code> is <code>AwsStsPrincipal</code> and <code>ParameterValue</code> isn't specified. • <code>JwtBodyClaim</code>: Specifies a JWT (JSON Web Token) body claim, where <code>ParameterName</code> is the key and <code>ParameterValue</code> is the value. For example, the parameter name for a JWT audience is <code>aud</code>. • <code>JwtHeaderClaim</code>: Specifies a JWT header claim, where <code>ParameterName</code> is the key and <code>ParameterValue</code> is the value. For example, the parameter name for a JWT key identifier is <code>kid</code>. • <code>NamedPrincipal</code>: Specifies that the parameter uses the same set of user credentials for all users who access the external system. • <code>PerUserPrincipal</code>: Provides access control at the individual user level. • <code>SigningCertificate</code>: Specifies the certificate used for an authentication signature. Use the <code>Certificate</code> field to specify the certificate name. Used for OAuth with JWT Bearer Flow and AwsSv4 STS with RolesAnywhere authentication. |
| <code>ParameterValue</code> | <p>Type string</p> <p>Description If the <code>ParameterType</code> field describes a literal value then the literal value is stored in this field.</p> |
| <code>Principal</code> | <p>Type string</p> <p>Description If the value of the <code>ParameterType</code> field is either <code>NamedPrincipal</code> or <code>PerUserPrincipal</code>, this field points to a permission set. That value then determines the set of users that are allowed to use credentials provided by the credential provider. The value of the <code>ParameterName</code> field specifies the name of this principal.</p> <p>First available in API version 56.0, this field is removed in API version 58.0 and later.</p> |
| <code>SequenceNumber</code> | <p>Type int</p> <p>Description Specifies the order of principals to apply when a user participates in more than one principal. For example, a user could be part of multiple permission sets that are applicable for a credential provider. Priority is from lower to higher numbers.</p> <p>You can set this field only when <code>ParameterType</code> is <code>NamedPrincipal</code>.</p> |

ExternalDataSource

Represents the metadata associated with an external data source. Create external data sources to manage connection details for integration with data and content that are stored outside your Salesforce org. This object is available in API version 51.0 and later.


Supported SOAP API Calls


`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|---------------------|--|
| CertificateId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description If you specify a certificate, your Salesforce org supplies it when establishing each two-way SSL connection with the external system. The certificate is used for digital signatures, which verify that requests are coming from your Salesforce org.</p> <p> Note: For best performance, verify that your remote HTTPS encrypted sites have OCSP (Online Certificate Status Protocol) stapling turned on.</p> |
| CustomConfiguration | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description A string of configuration parameters that are specific to the external data source's <code>type</code>.</p> <ul style="list-style-type: none">• Custom Configuration for the Salesforce Connect Cross-Org Adapter• Custom Configuration for the Salesforce Connect OData 2.0 or 4.0 Adapter• Custom Configuration for the Salesforce Connect Custom Adapter |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> |

| Field | Details |
|------------|--|
| | <p>Description</p> <p>The developer's internal name for the external data source used in the API.</p> <p>This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> |
| Endpoint | <p>Type</p> <p>textarea</p> <p>Properties</p> <p>Nullable</p> <p>Description</p> <p>The URL of the external system, or if that URL is defined in a named credential, the named credential URL. Corresponds to <code>URL</code> in the user interface.</p> <p>A named credential URL contains the scheme <code>callout:</code>, the name of the named credential, and an optional path. For example: <code>callout:My_Named_Credential/some_path</code>.</p> <p>You can append a query string to a named credential URL. Use a question mark (?) as the separator between the named credential URL and the query string. For example: <code>callout:My_Named_Credential/some_path?format=json</code>.</p> |
| FullName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Group, Nullable</p> <p>Description</p> <p>The full name of the associated type in Tooling API. The full name can include a namespace prefix. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsWritable | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>Lets the Lightning Platform and users in this org create, update, and delete records for external objects associated with the external data source. The external object data is stored outside the org. By default, external objects are read only. Corresponds to <code>Writable External Objects</code> in the user interface.</p> |

| Field | Details |
|-----------------|--|
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the external data source. The value for this field is the language value of the org.</p> |
| ManageableState | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package. Possible values are:</p> <ul style="list-style-type: none"> • <code>beta</code>—Managed-Beta • <code>deleted</code>—Managed-Proposed-Deleted • <code>deprecated</code>—Managed-Proposed-Deprecated • <code>deprecatedEditable</code>—SecondGen-Installed-Deprecated • <code>installed</code>—Managed-Installed • <code>installedEditable</code>—SecondGen-Installed-Editable • <code>released</code>—Managed-Released • <code>unmanaged</code>—Unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description A user-friendly name for the external data source. The label is displayed in the Salesforce user interface, such as in list views. Examples include Acme Team Marketing Site, or Acme SharePoint.</p> |
| Metadata | <p>Type ExternalDataSource</p> <p>Properties Create, Nillable, Update</p> <p>Description Provides access to the associated type and related fields in Tooling API.</p> |

| Field | Details |
|-------------------|--|
| NamedCredentialId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The Salesforce ID of the referenced named credential for an external data source. Required for Salesforce Connect adapters for Amazon DynamoDB, Amazon Athena, GraphQL, and OData 4.01. For connecting to other external data sources, the field must be null.</p> <p>This is a relationship field.</p> <p>Relationship Name NamedCredential</p> <p>Relationship Type Lookup</p> <p>Refers To NamedCredential</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the external data source. An external data source can be in an extension namespace different than the object.</p> |
| OAuthRefreshToken | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description The OAuth refresh token. Used to obtain a new access token for an end user when a token expires.</p> |
| OAuthScope | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description Specifies the scope of permissions to request for the access token.</p> |
| OAuthToken | <p>Type textarea</p> |

| Field | Details |
|---------------|---|
| | <p>Properties Nillable</p> <p>Description The access token issued by the external system.</p> |
| Password | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description The password to be used by your org to access the external system. Ensure that the credentials you use have adequate privileges to access the external system, perform searches, return data, and return information about the external system's metadata.</p> |
| PrincipalType | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Determines whether you're using one set or multiple sets of credentials to access the external system. Possible values are:</p> <ul style="list-style-type: none">• Anonymous• PerUser• NamedUser |
| Protocol | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The authentication protocol that's required to access the external system. Possible values are:</p> <ul style="list-style-type: none">• AwsSv4• Basic• Custom• Jwt• JwtExchange• NoAuthentication• Oauth• Password |

| Field | Details |
|------------|--|
| Repository | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Used for SharePoint Online. If metadata isn't accessible, use this field to create tables and default table fields.</p> |
| Type | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description For Salesforce Connect, specifies the adapter that connects to the external system. The valid values are:</p> <ul style="list-style-type: none"> • <code>AmazonAthena</code>—Amazon Athena • <code>AmazonDynamoDB</code>—Amazon DynamoDB • <code>GraphQL</code>—GraphQL • <code>OData</code>—OData 2.0 adapter • <code>OData4</code>—OData 4.0 adapter • <code>OData401</code>—OData 4.01 adapter • <code>SfdcOrg</code>—cross-org adapter • <code>ApexClassId</code>—<code>DataSource.Provider</code> class that defines the custom adapter created via the Apex Connector Framework <p>For Files Connect, specifies the data source type. The valid values are:</p> <ul style="list-style-type: none"> • <code>ContentHubSharepoint</code>—SharePoint 2010 or 2013 • <code>ContentHubSharepointOffice365</code>—SharePoint Online • <code>ContentHubSharepointOneDrive</code>—OneDrive for Business • <code>ContentHubGDrive</code>—Google Drive • <code>ContentHubIsotope</code>—Isotope <p>If Chatter is enabled, you can also specify <code>SimpleURL</code> to access data hosted on a web server that doesn't require authentication.</p> <ul style="list-style-type: none"> • <code>outgoingemail</code>—A data source used for sending an email through a quick action. <p>The <code>Identity</code> and <code>Wrapper</code> types are reserved for future use.</p> <p>For the federated search external data source type, the valid value is <code>OpenSearch</code>.</p> |
| Username | <p>Type string</p> |

| Field | Details |
|---------|--|
| | Properties Filter, Group, Nillable, Sort Description The username to be used by your org to access the external system. Ensure that the credentials you use have adequate privileges to access the external system, perform searches, return data, and return information about the external system's metadata. |
| Version | Type string Properties Filter, Group, Nillable, Sort Description Reserved for future use. |

Custom Configuration for the Salesforce Connect Cross-Org Adapter

The following sample JSON-encoded configuration string defines parameters that apply when the external data source's `type` is set to `SfdcOrg`.

```
{"apiVersion":"32.0","environment":"CUSTOM", "searchEnabled":"true","timeout":"120"}
```

The parameters correspond to these fields in the user interface:

- `apiVersion`—API Version
- `environment`—Connect to
- `searchEnabled`—Enable Search
- `timeout`—Connection Timeout

Custom Configuration for the Salesforce Connect OData 2.0 or 4.0 Adapter

The following JSON-encoded configuration string defines parameters that apply when the external data source's `type` is set to `OData` or `OData4`.

```
{"inlineCountEnabled":"true","csrfTokenName":"X-CSRF-Token",
"requestCompression":"false","pagination":"CLIENT",
"noIdMapping":"false","format":"ATOM",
"searchFunc":"","compatibility":"DEFAULT",
"csrfTokenEnabled":"true","timeout":"120",
"searchEnabled":"true"}
```

The parameters correspond to these fields in the user interface.

- `compatibility`—Special Compatibility
- `csrfTokenEnabled`—CSRF Protection
- `csrfTokenName`—Anti-CSRF Token Name
- `format`—Format

- `inlineCountEnabled`—Request Row Counts
- `noIdMapping`—High Data Volume
- `pagination`—Server Driven Pagination
- `requestCompression`—Compress Requests
- `searchEnabled`—Enable Search
- `searchFunc`—Custom Query Option for Salesforce Search
- `timeout`—Connection Timeout

Custom Configuration for the Salesforce Connect Custom Adapter

The following sample JSON-encoded configuration string defines the parameter that applies when the external data source's `type` is set to the ID of a `DataSource.Provider` class.

```
{"noIdMapping":"false"}
```

The `noIdMapping` parameter corresponds to the `High Data Volume` field in the user interface.

ExternalDataSrcDescriptor

Contains the metadata information for the external schema of an external data source. Use the metadata to map attributes from an AWS data source, such as Amazon DynamoDB and Amazon Athena, to Salesforce external object fields. Also, use the metadata to customize the data retrieval queries to an AWS data source. This object is available in API version 55.0 and later for Amazon DynamoDB and in API version 56.0 and later for Amazon Athena.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|-----------------------------|---|
| <code>CustomObjectId</code> | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description If set, the ID of the external object associated with the descriptor. This is a relationship field.</p> |

| Field | Details |
|----------------------|---|
| | Relationship Name CustomObject Relationship Type Lookup Refers To CustomObject |
| Descriptor | Type base64 Properties Nillable Description The descriptor document that contains the metadata information. |
| DescriptorVersion | Type string Properties Filter, Group, Nillable, Sort Description If the external system supports schema versioning for the data source, the optional descriptor document version tracks the external system's schema version. Several descriptors with different document versions may be active. |
| DeveloperName | Type string Properties Filter, Group, Sort Description The unique name of the child-level setup entity. |
| ExternalDataSourceId | Type reference Properties Filter, Group, Sort Description Salesforce ID of the external data source that defines the external system. This is a relationship field. Relationship Name ExternalDataSource Relationship Type Lookup |

| Field | Details |
|-----------------|--|
| | Refers To ExternalDataSource |
| FullName | Type string Properties Create, Group, Nillable Description The full name of the associated type in Tooling API. |
| Language | Type picklist Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort Description The language of the descriptor document. |
| ManageableState | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort Description The manageable state of the descriptor that is contained in a package. Possible values are: <ul style="list-style-type: none"> • beta—Managed-Beta • deleted—Managed-Proposed-Deleted • deprecated—Managed-Proposed-Deprecated • deprecatedEditable—SecondGen-Installed-Deprecated • installed—Managed-Installed • installedEditable—SecondGen-Installed-Editable • released—Managed-Released • unmanaged—Unmanaged |
| Metadata | Type complexvalue Properties Create, Nillable, Update Description The external data source descriptor's metadata. |

| Field | Details |
|-----------------|---|
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object.</p> |
| Subtype | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The subtype of the descriptor. Possible values are:</p> <ul style="list-style-type: none">• <code>SchemaTableDDL</code>—Used to store the metadata for the external data source.• <code>SchemaTableMetadata</code>—Used to cache information about the external system.• <code>SchemaTableQualifiers</code>—Used to customize the data retrieval query to the external system. |
| SystemVersion | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description The version that defines the descriptor format and allows compatibility with descriptor formats between Salesforce releases.</p> |
| Type | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The type of the descriptor. Possible value:</p> <ul style="list-style-type: none">• <code>Schema</code> |

ExternalServiceRegistration

Represents the External Service configuration for an org. Available in API version 39.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`


Supported REST HTTP Methods

GET, PUT, POST, and DELETE

Fields

| Field | Details |
|-------------|---|
| Description | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The external service description defined when the service is created.</p> |
| Language | <p>Type string</p> <p>Properties Create, DefaultedOnCreate, Filter, Group, Nillable, RestrictedPicklist, Sort, Update</p> <p>Description The language of the external service configuration.</p> <ul style="list-style-type: none"> Chinese (Simplified): zh_CN Chinese (Traditional): zh_TW Danish: da Dutch: nl_NL English: en_US Finnish: fi French: fr German: de Italian: it Japanese: ja Korean: ko Norwegian: no Portuguese (Brazil): pt_BR Russian: ru |

| Field | Details |
|------------------------------|---|
| | <ul style="list-style-type: none"> Spanish: <code>es</code> Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: <code>sv</code> Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |
| <code>ManageableState</code> | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> <code>beta</code> <code>deleted</code> <code>deprecated</code> <code>deprecatedEditable</code> <code>installed</code> <code>installedEditable</code> <code>released</code> <code>unmanaged</code> |
| <code>MasterLabel</code> | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Label for the External Service.</p> |
| <code>NamedCredential</code> | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The name reference of the named credential to be used for the service.</p> |
| <code>NamespacePrefix</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the package of which the External Service is a part.</p> |

| Field | Details |
|---------------------------|--|
| Schema | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description The content of the JSON schema in the OpenAPI 2.0 format.</p> |
| SchemaAbsoluteUrl | <p>Type url</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description The full, absolute URL to the schema. For API version 56.0 and later, populated when a user selects Absolute URL during registration.</p> |
| SchemaType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, RestrictedPicklist, Sort, Update</p> <p>Description ID format of the schema. For API version 48.0 and later, the valid value is <code>OpenApi</code>.</p> <p> Note: For API version 47.0 and earlier, the valid values are <code>InteragentHyperSchema</code> and <code>OpenApi</code>.</p> |
| SchemaUploadFileExtension | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The file's extension. For API version 56.0 and later, populated when a user selects Upload from local during registration.</p> |
| SchemaUploadFileName | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The file's name without the file extension. For API version 56.0 and later, populated when a user selects Upload from local during registration.</p> |
| SchemaUrl | <p>Type url</p> |

| Field | Details |
|---------------|--|
| | <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The schema URL defined when registering a service. The path must begin with "/" and be a relative path.</p> |
| Status | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, RestrictedPicklist, Sort</p> <p>Description Indicates whether the service registration is finished. Valid values are <code>complete</code> and <code>incomplete</code>.</p> |
| SystemVersion | <p>Type integer</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Identifies the external service registration revision. Valid values are <code>1</code> for the deprecated external service revision for API version 48.0 and earlier and <code>2</code> for the enhanced external service revision available in API version 48.0 and later. The default is <code>2</code>.</p> |

ExternalString

Represents a custom label for a translatable UI component. Includes access to the associated label in the Metadata API. Available in API version 38.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`


Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Limitations

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|-----------------|---|
| Category | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Text that categorizes the label, limited to 255 characters. Separate each category with a comma. This field can be used in filter criteria when creating custom label list views.</p> |
| IsProtected | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether the custom label is protected (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort</p> <p>Description The language of the custom label.</p> <p> Note: You can't change the language of an existing custom label.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> • <code>installedEditable</code> • <code>released</code> • <code>unmanaged</code> |

| Field | Details |
|-----------------|---|
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description An easily recognizable internal label to identify this custom label. This description is used in merge fields and is not translated.</p> |
| Name | <p>Type string</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The name used in Apex and Visualforce pages to reference the custom label. Names must contain only alphanumeric characters, start with a letter, contain no spaces or double underscores, and be unique from all other labels in your org.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the package of which the custom label is a part.</p> |
| Value | <p>Type string</p> <p>Properties Create, Filter, Sort, Update</p> <p>Description The custom label value, limited to 1,000 characters. This value can be translated into any language that Salesforce supports.</p> |

ExternalStringLocalization

Represents the translation of custom labels for a UI component represented by the [ExternalString](#) object. This object is available in API version 49.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

DELETE, GET, PATCH, POST


Special Access Rules

- Your organization must be using Professional, Enterprise, Performance, Unlimited, or Developer edition.
- Translation Workbench and data translation must be enabled in your org.
- To view this object, you must have the “View Setup and Configuration” permission.

Limitations

[SOSL Limitations](#) on page 36


Fields

| Field | Details |
|------------------|--|
| ExternalStringId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The ID of the ExternalString associated with the custom label that is being translated.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description The language for this translated text.</p> <p> Note: You can't change the language of an existing ExternalString.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable |

| Field | Details |
|-----------------|---|
| | <ul style="list-style-type: none"> • installed • installedEditable • released • unmanaged |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the package of which the custom label is a part.</p> |
| Value | <p>Type string</p> <p>Properties Create, Filter, Sort, Update</p> <p>Description The translated string value, limited to 32,000 characters or 96,000 bytes of data, up to the length of the translated string.</p> |

FieldDefinition

Represents a standard or custom field, providing row-based access to field metadata. Contrast FieldDefinition with EntityParticle, which represents each element of a field that can be presented in a user interface. FieldDefinition has parity with metadata type Field.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`query()`

`describeSObject()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#)

[SOSL Limitations](#)

Fields

| Field | Details |
|--------------------|---|
| BusinessOwnerId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Indicates the person or group associated with this field. The business owner understands the importance of the field's data to your company and might be responsible for determining the minimum security classification. This field is available in API version 45.0 and later.</p> |
| BusinessStatus | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Indicates whether the field is in use. Valid values include:</p> <ul style="list-style-type: none"> • Active • DeprecateCandidate • Hidden <p>This field is available in API version 45.0 and later.</p> |
| CompactLayoutItems | <p>Type QueryResult</p> <p>Properties Filter, Group, Sort</p> <p>Description The CompactLayoutItemInfo records associated with this field definition. Available in Tooling API starting version 34.0. Because this field represents a relationship, use only in subqueries. Example subquery:</p> <pre>SELECT Id, QualifiedApiName, (SELECT DurableId, SortOrder FROM CompactLayoutItems) FROM FieldDefinition WHERE EntityDefinition.QualifiedApiName = 'Account' AND QualifiedApiName = 'Name'</pre> |
| ComplianceGroup | <p>Type multipicklist</p> |

| Field | Details |
|------------------------------|--|
| | <p>Properties Filter, Nillable</p> <p>Description The compliance acts, definitions, or regulations related to the field's data. Valid values include:</p> <ul style="list-style-type: none"> • CCPA—California Consumer Privacy Act • COPPA—Children's Online Privacy Protection Act • GDPR—General Data Protection Regulation • HIPAA—Health Insurance Portability and Accountability Act • PCI—Payment Card Industry • PersonalInfo—Personal information. For use with the Enhanced Personal Information Management feature. Only available if Enhanced Personal Information Management and Digital Experiences are enabled. • PII—Personally Identifiable Information <p>This field is available in API version 47.0 and later.</p> |
| ControlledFields | <p>Type QueryResult</p> <p>Properties Filter, Group, Sort</p> <p>Description The controlled fields in a dependent picklist. Use in subqueries to reduce the number of queries. Available in Tooling API starting version 34.0. Because this field represents a relationship, use only in subqueries.</p> |
| ControllingFieldDefinition | <p>Type FieldDefinition</p> <p>Properties Filter, Group, Sort</p> <p>Description The field definition of the controlling field if this field is a dependent picklist. A dependent picklist works with a controlling picklist or checkbox to filter the available options. The value chosen in the controlling field affects the values available in the dependent field. This field is available in API version 14.0 and later. Available in Tooling API starting version 34.0.</p> |
| ControllingFieldDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The ID of the <code>ControllingFieldDefinition</code> for this field. Available in Tooling API starting version 34.0.</p> |

| Field | Details |
|--------------------|--|
| DataType | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Data type of the field, for example <code>Text (40)</code> or <code>Date/Time</code>. The values are defined as they are in the user interface, not the corresponding API data type names. Available in Tooling API starting version 34.0.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's org. Label is Record Type Name.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, because the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| EntityDefinition | <p>Type EntityDefinition</p> <p>Properties Filter, Group, Sort</p> <p>Description A relationship lookup to the object type that contains this field. For example, if the field is defined on an account, the lookup is to <code>Account</code>. You can't interact directly with this field. Instead, use it in queries.</p> <pre>SELECT EntityDefinition.Label FROM FieldDefinition WHERE EntityDefinition.QualifiedApi Name= 'Lead'</pre> |
| EntityDefinitionId | <p>Type string</p> |


| Field | Details |
|------------------------------|--|
| | <p>Properties Filter, Group, Sort</p> <p>Description The durable ID for the object defined in the <code>EntityDefinition</code> field.</p> |
| <code>ExtraTypeInfo</code> | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Represents further definition of a type. Available in Tooling API starting version 34.0.</p> <ul style="list-style-type: none"> For type textarea: <ul style="list-style-type: none"> <code>plaintextarea</code> <code>richtextarea</code> For type URL, image For type reference, <ul style="list-style-type: none"> <code>externallookup</code> <code>indirectlookup</code> <code>externallookup</code> For Account, <ul style="list-style-type: none"> <code>switchablepersonname</code> <code>personname</code> |
| <code>FullName</code> | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata object in Metadata API.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| <code>IsApiFilterable</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field can be specified in the <code>WHERE</code> clause of a query string.</p> |

| Field | Details |
|----------------------------------|---|
| | <p>Available in Tooling API starting version 34.0.</p> <p>You can't sort or filter compound fields. This field's value is always <code>false</code> for compound fields.</p> |
| <code>IsApiGroupable</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field can be included in the <code>GROUP BY</code> clause of a SOQL query. Available in Tooling API starting version 34.0.</p> |
| <code>IsApiSortable</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, a query can sort on this field. Available in Tooling API starting version 34.0. You can't sort or filter compound fields. This field's value is always <code>false</code> for compound fields.</p> |
| <code>IsCalculated</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field's value is calculated. Available in Tooling API starting version 34.0.</p> |
| <code>IsCompactLayoutable</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field can be included in a compact layout. Available in Tooling API starting version 34.0.</p> |
| <code>IsCompound</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> |

| Field | Details |
|------------------------------------|--|
| | <p>Description</p> <p>If <code>true</code>, the field is a compound of other fields. The default value is <code>false</code>. Available in Tooling API starting version 38.0.</p> |
| <code>IsEverApiAccessible</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the field is describable in the API. The default value is <code>false</code>. Available in Tooling API starting version 49.0.</p> |
| <code>IsFieldHistoryTracked</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the field's history can be tracked. Available in Tooling API starting version 34.0.</p> |
| <code>IsFlsEnabled</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, you can set field-level security on this field. Available in Tooling API starting version 35.0.</p> |
| <code>IsHighScaleNumber</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>Indicates whether the field stores numbers to eight decimal places regardless of what's specified in the field details (<code>true</code>) or not (<code>false</code>). Used to handle currencies for products that cost fractions of a cent, in large quantities. If high-scale unit pricing isn't enabled in your organization, this field isn't returned. Available in Tooling API starting version 34.0.</p> |
| <code>IsHtmlFormatted</code> | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> |

| Field | Details |
|-------------------------------|--|
| | Description If <code>true</code> , the field contains HTML. Available in Tooling API starting version 34.0. |
| <code>IsIndexed</code> | Type boolean Properties Defaulted on create, Filter, Group, Sort Description If <code>true</code> , the field is indexed in the database. Available in Tooling API version 35.0 and later. Internal (database) indexing is different from indexing for search. We recommend targeting indexed fields for better response times in SOQL queries, reports, and list views. |
| <code>IsListFilterable</code> | Type boolean Properties Defaulted on create, Filter, Group, Sort Description If <code>true</code> , the field can be filtered for a related list. Available in Tooling API starting version 34.0. |
| <code>IsListSortable</code> | Type boolean Properties Defaulted on create, Filter, Group, Sort Description If <code>true</code> , the field can be sorted for a related list. Available in Tooling API starting version 34.0. |
| <code>IsListVisible</code> | Type boolean Properties Defaulted on create, Filter, Group, Sort Description If <code>true</code> , the field can be included in a related list. Available in Tooling API starting version 34.0. |
| <code>IsNameField</code> | Type boolean Properties Defaulted on create, Filter, Group, Sort Description If <code>true</code> , the field is a name field. Available in Tooling API starting version 34.0. |

| Field | Details |
|-------------------------|--|
| IsNillable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field can be left out of queries on the object. Available in Tooling API starting version 34.0.</p> |
| IsPolymorphicForeignKey | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the foreign key includes multiple object types (<code>true</code>) or not (<code>false</code>). Available in Tooling API version 41.0 and later.</p> |
| IsSearchPrefilterable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether a foreign key can be included in prefiltering (<code>true</code>) or not (<code>false</code>) when used in a SOSL <code>WHERE</code> clause. <i>Prefiltering</i> means to filter by a specific field value before executing the full search query. Available in Tooling API version 40.0 and later. Prefiltering is supported only in <code>WHERE</code> clauses with the equals (<code>=</code>) operator.</p> |
| IsWorkflowFilterable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the field can be filtered for a workflow. Available in Tooling API starting version 34.0.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The label that corresponds to the field in the user interface. If the label has been translated, the value returned is in the user's language.</p> |


| Field | Details |
|---------------|---|
| Length | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description The maximum number of bytes available to store the value in this field. Available in Tooling API starting version 34.0.</p> |
| LookupFilters | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The lookup filters associated with the field. Because this field represents a relationship, use only in subqueries. Example subquery:</p> <pre>SELECT DurableId, QualifiedApiName, (SELECT Id, SourceObject, SourceFieldDefinition.Label, IsOptional, Active, Developer Name, LastModifiedBy.Name, LastModifiedDate FROM LookupFilters) FROM EntityDefinition WHERE QualifiedApiName = 'User''</pre> <p> Note: LookupFilter isn't supported on the article type object.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Primary label for this object. This display value is the internal label that isn't translated. Limit: 40 characters.</p> |
| Metadata | <p>Type CustomField</p> <p>Properties Create, Nillable, Update</p> <p>Description Compact layout metadata, from the <code>mns</code> namespace. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|-----------------|---|
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In a Developer Edition org, the namespace prefix is set to the namespace prefix of the org for all objects that support it. There's an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In an org other than a Developer Edition org, NamespacePrefix is only set for objects that are part of an installed managed package. There's no namespace prefix for all other objects. |
| Particles | <p>Type QueryResult</p> <p>Properties Filter, Group, Sort</p> <p>Description The EntityParticles associated with this field. Available in Tooling API starting version 34.0. Because this field represents a relationship, use only in subqueries.</p> |
| Precision | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description The maximum number of digits allowed for this field. Available in Tooling API starting version 34.0.</p> |
| Publisher | <p>Type Publisher</p> <p>Properties Filter, Group, Sort</p> <p>Description The publisher of this field, for example Salesforce, a user, or a package name. Available in Tooling API starting version 34.0.</p> |

| Field | Details |
|----------------------|--|
| PublisherId | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description ID of the publisher associated with this field. Available in Tooling API starting version 34.0.</p> |
| QualifiedApiName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description A unique external name for the field.</p> |
| ReferenceTargetField | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Available only for indirect lookup relationship fields on external objects. Specifies the field on the parent object to match against this indirect lookup relationship field, whose values come from an external data source. The specified custom field on the parent object must have both <code>externalId</code> and <code>unique</code> set to <code>true</code>. Available in Tooling API starting version 34.0.</p> |
| ReferenceTo | <p>Type RelationshipReferenceTo</p> <p>Properties Filter, Group, Sort</p> <p>Description The array of values in this field represents the possible object types of the referenced objects. For example, if a FieldDefinition represents a field on Event.Whole, the values in this field are <code>Contact</code>, <code>Lead</code>, and custom objects with a relationship to Events. Available in Tooling API starting version 34.0.</p> |
| RelationshipDomains | <p>Type QueryResult</p> <p>Properties Filter, Group, Sort</p> <p>Description Metadata about the relationships this field has with other objects. Available in Tooling API starting version 34.0. Because this field represents a relationship, use only in subqueries.</p> |

| Field | Details |
|--------------------------|---|
| RelationshipName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The value for one-to-many relationships. For example, in the object MyObject with a relationship to YourObject, the relationship name is typically YourObjects. Available in Tooling API starting version 34.0.</p> |
| RunningUserFieldAccessId | <p>Type string</p> <p>Properties</p> <p>Description Reserved for internal use. Available in Tooling API starting version 34.0.</p> |
| Scale | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description The number of digits to the right of the decimal in an integer. For example, 3.00 has a scale of 2. Available in Tooling API starting version 34.0.</p> |
| SecurityClassification | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Indicates the sensitivity of the data contained in this field. Valid values include:</p> <ul style="list-style-type: none"> • Public • Internal • Confidential • Restricted • MissionCritical <p>This field is available in API version 45.0 and later.</p> |
| ServiceDataType | <p>Type DataType</p> <p>Properties Filter, Group, Sort</p> |

| Field | Details |
|----------------------|---|
| | Description The service datatype for this field. Available in Tooling API starting version 34.0. |
| ServiceDataTypeId | Type string Properties Filter, Group, Sort Description The ID of the ServiceDataType. Available in Tooling API version 34.0. Don't use, provided for backward compatibility only. |
| ServiceDataTypes | Type QueryResult Properties Filter, Group, Sort Description The ServiceDataTypes associated with this field. Available in Tooling API starting version 34.0. Because this field represents a relationship, use only in subqueries. |
| ValueType | Type DataType Properties Filter, Group, Sort Description The data type of the field. Available in Tooling API version 35.0. |
| ValueTypeId | Type string Properties Filter, Group, Sort Description The ID of the ValueType. Available in Tooling API version 35.0. |
| WorkflowFieldUpdates | Type QueryResult Properties Filter, Group, Sort Description The workflow field updates for this field. Field updates allow you to automatically update a field value to one that you specify when a workflow rule is triggered. Available in Tooling API starting version 34.0. Because this field represents a relationship, use only in subqueries. |

 **Note:** FieldDefinition fields are exposed in SOAP API version 45.0 and later. You can use Tooling API to query for FieldDefinition fields in guest user mode in API version 44.0 and earlier. In API version 45.0 and later, use SOAP API to get this data in guest user mode. FieldDefinition is still exposed in Tooling API to User Profiles with the ViewSetup permission.

Usage

When querying or searching the FieldDefinition object, you must filter using the following syntax: `WHERE EntityDefinition.QualifiedApiName = '[ObjectAPIName]'`.

Example Query:

```
SELECT SELECT DurableId, QualifiedApiName, Label, DataType, ValueTypeId, PublisherId,
Length, Precision, Scale, EntityDefinitionId, RelationshipName
FROM FieldDefinition
WHERE EntityDefinition.QualifiedApiName = 'Customer_Sat_Survey__c' ORDER BY Label ASC
NULLS FIRST
```

Example Query: Find Parent Object Types

Some fields can have more than one type of object in a relationship (polymorphic). For example, Task and Event can have relationships with Contact or Lead.

Use this query to retrieve a list of objects that can have a relationship with the FieldDefinition.

```
SELECT QualifiedApiName, RelationshipName, ReferenceTo, ReferenceTargetField
FROM FieldDefinition
WHERE EntityDefinition.QualifiedApiName = 'Event' AND QualifiedApiName = 'WhoId'
```

Example Query: Find the Datatypes for Account Fields

```
SELECT QualifiedApiName, (Select DataType From Particles)
FROM FieldDefinition
WHERE EntityDefinition.QualifiedApiName ='Account'
```

CustomField Metadata

| Field Name | Field Type | Description |
|------------------|---|--|
| caseSensitive | boolean | Indicates whether the field is case sensitive (<code>true</code>) or not (<code>false</code>). For indirect lookup relationship fields on external objects, this attribute affects how this custom field's values are matched against the values of <code>referenceTargetField</code> . |
| defaultValue | string | If specified, represents the default value of the field. |
| deleteConstraint | DeleteConstraint is an enumeration of strings | Provides deletion options for lookup relationships. Valid values are: SetNull Default value. If the lookup record is deleted, the lookup field is cleared. Restrict If the record is in a lookup relationship, prevents it from being deleted. |

| Field Name | Field Type | Description |
|--------------------------|---------------|--|
| | | Cascade Deletes the lookup record and associated lookup fields. For more information on lookup relationships, see “Object Relationships” in Salesforce Help. |
| description | string | Description of the field. |
| displayFormat | string | The display format. |
| displayLocationInDecimal | boolean | Indicates how the value of a Geolocation custom field appears in the user interface. If <code>true</code> , the geolocation appears in decimal notation. If <code>false</code> , the geolocation appears as degrees, minutes, and seconds. |
| externalDeveloperName | string | Available only for external objects. Name of the table column on the external data source that maps to this custom field in Salesforce. Corresponds to <code>External Column Name</code> in the user interface. This field is available in API version 32.0 and later. |
| externalId | boolean | Indicates whether the field is an external ID field (<code>true</code>) or not (<code>false</code>). |
| formula | string | If specified, represents a formula on the field. |
| formulaTreatBlankAs | TreatBlanksAs | Indicates how to treat blanks in a formula. Valid values are <code>BlankAsBlank</code> or <code>BlankAsZero</code> . |
| fullName | string | Required. The internal name of the object. White spaces and special characters are escaped for validity. The name must: <ul style="list-style-type: none"> Contain characters, letters, or the underscore (<code>_</code>) character Must start with a letter Can't end with an underscore Can't contain two consecutive underscore characters |
| indexed | boolean | Indicates if the field is indexed. If this field is unique or the <code>externalId</code> is set to <code>true</code> , the <code>isIndexed</code> value is set to <code>true</code> . This field has been deprecated as of version 14.0 and is only provided for backward compatibility. |
| inlineHelpText | string | Represents the content of field-level help. For more information, see “Define Field-Level Help” in Salesforce Help. |
| isFilteringDisabled | boolean | Available only for external objects. Indicates whether the custom field is available in filters. This field is available in API version 32.0 and later. |
| isNameField | boolean | Available only for external object fields of type text. For each external object, you can specify one field as the name field. If you set this field's value to <code>true</code> , make sure that the external table column identified by <code>externalDeveloperName</code> contains name values. This field is available in API version 32.0 and later. |
| isSortingDisabled | boolean | Available only for external objects. Indicates whether the custom field is sortable. This field is available in API version 32.0 and later. |

| Field Name | Field Type | Description |
|---------------------------------------|------------------------|---|
| <code>reparentableMasterDetail</code> | boolean | Indicates whether the child records in a master-detail relationship on a custom object can be reparented to different parent records. The default value is <code>false</code> . This field is available in API version 25.0 and later. |
| <code>label</code> | string | Label for the field. You can't update the label for standard picklist fields, such as the <code>Industry</code> field for accounts. |
| <code>length</code> | int | Length of the field. |
| <code>lookupFilter</code> | LookupFilter | The Lookup filter definition for the custom field. Available in API version 30.0 and later. |
| <code>maskChar</code> | EncryptedFieldMaskChar | For encrypted fields, specifies the character to be used as a mask. Valid values: <ul style="list-style-type: none"> • <code>asterisk</code> • <code>x</code> |
| <code>maskType</code> | EncryptedFieldMaskType | For encrypted text fields, specifies the format of the masked and unmasked characters in the field. Valid values: <p>all All characters in the field are hidden. This option is equivalent to the <code>Mask All Characters</code>.</p> <p>creditCard The first 12 characters are hidden, the last four are displayed. This option is equivalent to the <code>Credit Card Number</code> option.</p> <p>ssn The first five characters are hidden, the last four are displayed. This option is equivalent to the <code>Social Security Number</code> option.</p> <p>lastFour All characters are hidden, except the last four are displayed. This option is equivalent to the <code>Last Four Characters Clear</code> option.</p> <p>sin All characters are hidden, except the last four are displayed. This option is equivalent to the <code>Social Insurance Number</code> option.</p> <p>nino All characters are hidden. If the field contains nine characters, Salesforce automatically inserts spaces after each pair of characters. This option is equivalent to the <code>National Insurance Number</code> option.</p> |
| <code>picklist</code> | Picklist | If specified, the field is a picklist, and this field enumerates the picklist values and labels. |
| <code>populateExistingRows</code> | boolean | Indicates whether existing rows are populated (<code>true</code>) or not (<code>false</code>). |
| <code>precision</code> | int | The precision for number values. Precision is the number of digits in a number. For example, the precision value for the number 256.99 is 5. |

| Field Name | Field Type | Description |
|----------------------|--|---|
| referenceTargetField | string | Available only for indirect lookup relationship fields on external objects. Specifies the custom field on the parent object to match against this indirect lookup relationship field, whose values come from an external data source. The specified custom field on the parent object must have both <code>externalId</code> and <code>unique</code> set to <code>true</code> . This field is available in API version 32.0 and later. |
| referenceTo | string | If specified, indicates a reference this field has to another object. |
| relationshipLabel | string | Label for the relationship. |
| relationshipName | string | If specified, indicates the value for one-to-many relationships. For example, in the object <code>MyObject</code> that had a relationship to <code>YourObject</code> , the relationship name <code>YourObjects</code> makes the relationship type obvious. |
| relationshipOrder | int | This field is valid for all master-detail relationships, but the value is only non-zero for junction objects. A junction object has two master-detail relationships, and is analogous to an association table in a many-to-many relationship. Junction objects must define one parent object as primary (0), the other as secondary (1). The definition of primary or secondary affects delete behavior and inheritance of look and feel, and record ownership for junction objects. For more information, see Salesforce Help . 0 or 1 are the only valid values, and 0 is always the value for objects that aren't junction objects. |
| required | boolean | Indicates whether the field requires a value on creation (<code>true</code>) or not (<code>false</code>). |
| scale | int | The scale for the field. Scale is the number of digits to the right of the decimal point in a number. For example, the number 256.99 has a scale of 2. |
| startingNumber | int | If specified, indicates the starting number for the field. |
| stripMarkup | boolean | Set to <code>true</code> to remove markup, or <code>false</code> to preserve markup. Used when converting a rich text area to a long text area. |
| summarizedField | string | Represents the field on the detail row that's being summarized. This field can't be null unless the value of <code>SummaryOperation</code> is <code>count</code> . |
| summaryForeignKey | string | Represents the master-detail field on the child that defines the relationship between the parent and the child. |
| summaryOperation | SummaryOperations is an enumeration of strings | Represents the sum operation to be performed. Valid values: <ul style="list-style-type: none"> Count Min Max Sum |
| trackFeedHistory | boolean | Indicates whether the field is enabled for feed tracking (<code>true</code>) or not (<code>false</code>). This field is available in API version 18.0 and later. |

| Field Name | Field Type | Description |
|-------------------------------|--|---|
| <code>trackHistory</code> | boolean | Indicates whether history tracking is enabled for the field (<code>true</code>) or not (<code>false</code>). Also available for standard object fields (picklist and lookup fields only) in API version 30.0 and later. |
| <code>trackTrending</code> | boolean | Indicates whether historical trending data is captured for the field (<code>true</code>) or not (<code>false</code>). If this attribute is <code>true</code> for at least one field, the object is enabled for historical trending. Available in API version 29.0 and later. |
| <code>trueValueIndexed</code> | boolean | This field is only relevant for a checkbox field. If set, true values are built into the index. This field has been deprecated as of API version 14.0 and is only provided for backward compatibility. |
| <code>type</code> | FieldType is an enumeration of strings | <p>Indicates the field type for the field. Valid values:</p> <ul style="list-style-type: none"> • Address (beta) • AutoNumber • Lookup • MasterDetail • Checkbox • Currency • Date • DateTime • Email • EncryptedText • Number¹ • Percent • Phone • Picklist • MultiselectPicklist • Summary • Text • TextArea • LongTextArea • Summary • Url • Hierarchy • File • Html • Geolocation <p>For standard fields on standard objects, the <code>type</code> field is optional. This field is included for some standard field types, such as Picklist or Lookup, but not for others. The <code>type</code> field is included for custom fields.</p> |

| Field Name | Field Type | Description |
|--------------------------------------|------------|---|
| <code>unique</code> | boolean | Indicates whether the field is unique (<code>true</code>) or not (<code>false</code>). |
| <code>visibleLines</code> | int | Indicates the number of lines displayed for the field. |
| <code>writeRequiresMasterRead</code> | boolean | <p>Sets the minimum sharing access level required on the parent record to create, edit, or delete child records. This field applies only to master-detail or junction object custom field types.</p> <ul style="list-style-type: none"> <code>true</code>—Allows users with “Read” access to the parent record permission to create, edit, or delete child records. This setting makes sharing less restrictive. <code>false</code>—Allows users with “Read/Write” access to the parent record permission to create, edit, or delete child records. This setting is more restrictive than <code>true</code>, and is the default value. <p>For junction objects, the most restrictive access from the two parents is enforced. For example, you set to <code>true</code> on both master-detail fields, but users have “Read” access to one parent record and “Read/Write” access to the other parent record. In this example, users are unable to create, edit, or delete child records.</p> |

Picklist Metadata


| Field Name | Field Type | Description |
|-------------------------------|---------------------------------|---|
| <code>controllingField</code> | string | The <code>fullName</code> of the controlling field if this field is a dependent picklist. A dependent picklist works with a controlling picklist or checkbox to filter the available options. The value chosen in the controlling field affects the values available in the dependent field. This field is available in API version 14.0 and later. |
| <code>picklistValues</code> | PicklistValue[] | Required. Represents a set of values for a picklist. |
| <code>sorted</code> | boolean | Required. Indicates whether values are sorted (<code>true</code>), or not (<code>false</code>). |

PicklistValue Metadata

This metadata type defines a value in the picklist and specifies whether this value is the default value. This type extends `Metadata` and inherits its `fullName` field.

Note the following when working with picklist values:

- When you retrieve a standard object, all picklist values are retrieved, not just the customized picklist values.
- When you deploy changes to standard picklist fields, picklist values are added as needed.
- You can't set a picklist value as inactive, but if the picklist value is missing and you invoke an `update()` call, the missing value becomes inactive.

| Field Name | Field Type | Description |
|-------------------------------------|------------|---|
| <code>allowEmail</code> | boolean | Indicates whether this value lets users email a quote PDF (<code>true</code>), or not (<code>false</code>). This field is only relevant for the <code>Status</code> field in quotes. This field is available in API version 18.0 and later. |
| <code>closed</code> | boolean | Indicates whether this value is associated with a closed status (<code>true</code>), or not (<code>false</code>). This field is only relevant for the standard <code>Status</code> field in cases and tasks. This field is available in API version 16.0 and later. |
| <code>color</code> | string | Indicates the color assigned to the picklist value when used in charts on reports and dashboards. The color is in hexadecimal format; for example, <code>#FF6600</code> . If a color isn't specified, it's assigned dynamically during chart generation. This field is available in API version 17.0 and later. |
| <code>controllingFieldValues</code> | string[] | <p>A list of values in the controlling field that are linked to this picklist value. The controlling field can be a checkbox or a picklist. This field is available in API version 14.0 and later. The values in the list depend on the field type:</p> <ul style="list-style-type: none"> • Checkbox: <code>checked</code> or <code>unchecked</code>. • Picklist: The <code>fullName</code> of the picklist value in the controlling field. |
| <code>converted</code> | boolean | Indicates whether this value is associated with a converted status (<code>true</code>), or not (<code>false</code>). This field is relevant for only the standard <code>Lead Status</code> field in leads. Your organization can set its own guidelines for determining when a lead is qualified. The best practice is to convert a lead when it becomes a real opportunity that you want to forecast. For more information, see "Convert Qualified Leads" in Salesforce Help. This field is available in API version 16.0 and later. |
| <code>cssExposed</code> | boolean | <p>Indicates whether this value is available in your Self-Service Portal (<code>true</code>), or not (<code>false</code>). This field is only relevant for the standard <code>Case Reason</code> field in cases.</p> <p>Self-Service provides an online support channel for your customers allowing them to resolve their inquiries without contacting a customer service representative. For more information about Self-Service, see "Setting Up Your Self-Service Portal" in Salesforce Help.</p> <p> Note: Starting with Spring '12, the Self-Service portal isn't available for new Salesforce orgs. Existing orgs continue to have access to the Self-Service portal.</p> <p>This field is available in API version 16.0 and later.</p> |
| <code>default</code> | boolean | Required. Indicates whether this value is the default picklist value in the specified picklist (<code>true</code>), or not (<code>false</code>). |
| <code>description</code> | string | Description of a custom picklist value. This field is only relevant for the standard <code>Stage</code> field in opportunities. It's useful to include a description for a customized picklist value so that the historical reason for creating it can be tracked. This field is available in API version 16.0 and later. |

| Field Name | Field Type | Description |
|-------------------------------|---|--|
| <code>forecastCategory</code> | ForecastCategories, an enumeration of type string | <p>Indicates whether this value is associated with a forecast category (<code>true</code>), or not (<code>false</code>). This field is only relevant for the standard <code>Stage</code> field in opportunities. Valid values:</p> <ul style="list-style-type: none"> • Omitted • Pipeline • BestCase • Forecast • Closed <p>This field is available in API version 16.0 and later.</p> |
| <code>fullName</code> | string | <p>The name used as a unique identifier for API access. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is inherited from Metadata.</p> |
| <code>highPriority</code> | boolean | <p>Indicates whether this value is a high priority item (<code>true</code>), or not (<code>false</code>). This field is only relevant for the standard <code>Priority</code> field in tasks. For more information about tasks, see “Start Using Tasks” in Salesforce Help. This field is available in API version 16.0 and later.</p> |
| <code>probability</code> | int | <p>Indicates whether this value is a probability percentage (<code>true</code>), or not (<code>false</code>). This field is only relevant for the standard <code>Stage</code> field in opportunities. This field is available in API version 16.0 and later.</p> |
| <code>reverseRole</code> | string | <p>A picklist value corresponding to a reverse role name for a partner. For example, for the role “subcontractor”, a reverse role is “general contractor”. Assigning a partner role to an account in Salesforce creates a reverse partner relationship so that both accounts list the other as a partner. This field is only relevant for partner roles.</p> <p>For more information, see “Partner Fields” in Salesforce Help.</p> <p>This field is available in API version 18.0 and later.</p> |
| <code>reviewed</code> | boolean | <p>Indicates whether this value is associated with a reviewed status (<code>true</code>), or not (<code>false</code>). This field is only relevant for the standard <code>Status</code> field in solutions. For more information about opportunities, see “Creating Solutions” in Salesforce Help. This field is available in API version 16.0 and later.</p> |
| <code>won</code> | boolean | <p>Indicates whether this value is associated with a closed or won status (<code>true</code>), or not (<code>false</code>). This field is only relevant for the standard <code>Stage</code> field in opportunities. This field is available in API version 16.0 and later.</p> |

RelationshipReferenceTo Type

| Field | Type | Details |
|-------------|----------|--|
| referenceTo | string[] | The objects that can have a relationship to the field represented by this FieldDefinition. |

WorkflowFieldUpdate Metadata

For more information about WorkflowFieldUpdate, see the *Metadata API Developer's Guide*.

FieldMapping

Represents a mapping between fields in an object in the org and fields in a data service. A data service uses two separate field maps: one controls how the data service matches records in an object, and the other controls how the data service adds or updates data for an existing record.

This object is available in API version 38.0 and later.


Supported SOAP Calls

`query()`, `search()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|---------------|--|
| DeveloperName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description A unique name for this FieldMapping. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Provides a globally unique identifier for the FieldMapping, which prevents conflicts with FieldMapping objects from other packages that have the same MasterLabel.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |

| Field | Details |
|----------------------|--|
| FieldMappingClientId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description A foreign key reference to a CleanRule that uses this FieldMapping.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The language of the FieldMapping. The following values are supported:</p> <ul style="list-style-type: none"> Chinese (Simplified): zh_CN Chinese (Traditional): zh_TW Danish: da Dutch: nl_NL English: en_US Finnish: fi French: fr German: de Italian: it Japanese: ja Korean: ko Norwegian: no Portuguese (Brazil): pt_BR Russian: ru Spanish: es Spanish (Mexico): es_MX Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: sv Thai: th The Salesforce user interface is fully translated to Thai, but Help is in English. |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Master label for this object. This display value is the internal label that is not translated.</p> |

| Field | Details |
|-------------|---|
| SubjectType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description An object that's acted on by this FieldMapping. The set of picklist values includes all the standard and custom object types in your org. However, if you specify an object that the data service doesn't support, the API call returns an error.</p> |

FieldMappingField

Represents a field in an object in the org that maps to a field in a data service.

This object is available in API version 38.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|-------------------|---|
| DataServiceField | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The display name of the field in the data service that maps to this FieldMappingField.</p> |
| FieldMappingRowId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description Foreign key for the FieldMappingRow object associated with this FieldMappingField object.</p> |

| Field | Details |
|-----------------------|--|
| DataServiceObjectName | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description A data service object that contains the field represented by this FieldMappingField. The set of picklist values includes all the object types defined in the data service. However, if you specify a non-existent object, the API call returns an error.</p> |
| Priority | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Represents the priority that the data service uses when it updates the field, relative to other update rules that exist for the same field.</p> |

FieldMappingRow

Represents a field in a data service record that maps to a field in an object record in the org.

This object is available in API version 38.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|----------------|--|
| FieldMappingID | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description A foreign key reference to the parent FieldMapping for this FieldMappingRow.</p> |

| Field | Details |
|------------|---|
| FieldName | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The set of picklist values includes all the standard and custom object types in your org.</p> |
| Operation | <p>Type picklist</p> <p>Properties Create (reserved for future use), Defaulted on create (reserved for future use), Filter, Group, Nillable (reserved for future use), Restricted picklist (reserved for future use), Sort, Update (reserved for future use)</p> <p>Description The comparison operation that the data service applies when it compares the value of this FieldMappingRow to the mapped field in the object specified in <code>ObjectType</code>. The following values are supported.</p> <ul style="list-style-type: none"> • <code>AutoFill</code> fills empty fields and keeps values of fields that already contain data. • <code>Overwrite</code> fills empty fields and updates fields that already contain data. History tracking is required for fields set to <code>Overwrite</code>. |
| ObjectType | <p>Type picklist</p> <p>Properties CreateFilter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The standard or custom object in your org that contains the field mapped by this FieldMappingRow. The set of picklist values includes all the standard and custom object types in your org. However, if you specify an object that the data service doesn't support, the API call returns an error.</p> |

FieldRestrictionRule

Represents a field visibility rule that controls whether a field is visible to a user, based on the field's inclusion in the PersonalInfo_EPIM field set. If Enhanced Personal Information Management setting was enabled before Spring '22, field visibility is based on the field's compliance categorization. This object is available in API version 52.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods



DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules

- To access this object, you must have the Manage Sharing permission.
- To create and manage Employee field visibility rules, you must be assigned a Workplace Command Center permission set license and the Provides access to Workplace Command Center features system permission.
- To create and manage User field visibility rules, you must enable Digital Experiences and the Enhanced Personal Information Management feature.

Fields

| Field | Details |
|--------------------|---|
| Classification | <p>Type string[]</p> <p>Properties Filter</p> <p>Description Required. The data classification compliance categorization or field set that is targeted by the rule. The rule applies to fields that are marked with this categorization or included in this field set. If you enabled Enhanced Personal Information Management before Spring '22 (API version 54.0), you can use Salesforce's default compliance categorization values or values that you add yourself. If you enabled Enhanced Personal Information Management after Spring '22 (API version 54.0), use the PersonallInfo_EPIM field set or a field set that you add yourself.</p> |
| ClassificationType | <p>Type ClassificationType (enumeration of type string)</p> <p>Properties Defaulted on create, Filter, Group, Restricted picklist, Sort</p> <p>Description The type of classification method used in your org. If you enabled Enhanced Personal Information Management before Spring '22 (API version 54.0), use <code>ComplianceCategory</code>. If you enabled Enhanced Personal Information Management after Spring '22, use <code>FieldSet</code>.</p> <ul style="list-style-type: none"> • <code>ComplianceCategory</code>— • <code>FieldSet</code>— <p>The default value is <code>ComplianceCategory</code>.</p> <p>Available in API version 54.0 and later.</p> |

| Field | Details |
|-----------------|---|
| Description | <p>Type textarea</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. The description of the rule.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name for the FieldRestrictionRule object.</p> <p>This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| EnforcementType | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Restricted picklist, Sort</p> <p>Description Required. The type of rule.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • <code>FieldRestrict</code>—Field visibility rule. Only this value is valid. • <code>Restrict</code>—Do not use. • <code>Scoping</code>—Do not use. |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description Required. The full name of the associated FieldRestrictionRule in Metadata API. The full name can include a namespaceprefix.</p> |

| Field | Details |
|--------------|---|
| | <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the rule is active (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the field visibility rule. The value for this field is the language value of the org.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. Label for the field visibility rule.</p> |
| Metadata | <p>Type <code>mns</code> : FieldRestrictionRule</p> <p>Properties Create, Nillable, Update</p> <p>Description The field visibility rule's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| RecordFilter | <p>Type textarea</p> <p>Properties Create, Filter, Group, Sort, Update</p> |

| Field | Details |
|--------------|---|
| | Description Required. The criteria that determine which fields are visible to the specified users. For example, the field can check if the logged-in user matches the Employee's ID. |
| TargetEntity | Type picklist Properties Filter, Group, Restricted picklist, Sort Description Required. The object for which you're creating the rule. Only the Employee and User objects are supported. |
| UserCriteria | Type textarea Properties Create, Filter, Group, Sort, Update Description Required. The users that this rule applies to, such as all active users or users with a specified role or profile. |
| Version | Type int Properties Filter, Group, Sort Description Required. The rule's version number. |

FieldSet

Represents the metadata for a group of fields. Available from API version 33.0 or later.

Supported SOAP Calls

`create()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, HEAD

Fields

| Field | Details |
|-----------------|---|
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The field set description. This can be useful to describe the reason for creating the set or its intended use.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The API name of the field set.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The set's label.</p> |
| NamespacePrefix | <p>Type string</p> |

| Field | Details |
|-------|--|
| | Properties Filter, Group, Nillable, Sort |
| | Description The namespace of the package of which the field set is a part. |

FlexiPage

Represents a Lightning page. A Lightning page is a customizable page composed of regions containing Lightning components. Includes access to the associated FlexiPage object in the Metadata API. Available from API version 31.0 or later.

Lightning pages are used in several places.

- In the Salesforce mobile app, a Lightning page is the home page for an app that appears in the navigation menu.
- In Lightning Experience, Lightning pages can be used:
 - To customize the layout of record pages, the Salesforce Home page, and the Email Application pane in the Outlook and Gmail integrations.
 - As the home page for an app.
 - As the utility bar for a Lightning app.



Note: These pages are known as FlexiPages in the API, but are referred to as Lightning pages in the rest of the Salesforce documentation and UI.



Note: In API version 49.0 and later, arrays in a FlexiPage are represented as `valueList`. Each array element is represented as `valueListItem`, and the element name is represented as `value`. In API version 48.0 and earlier, arrays are represented as `value` and array elements are formatted as a comma-separated list. Any FlexiPage retrieved using API version 49.0 or later uses `valueList` to represent component property array values, regardless of which API version was used to create the FlexiPage.

Supported SOAP Calls


`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`

Fields

| Field | Details |
|-------------|--|
| Description | Type string |
| | Properties Filter, Group, Nillable, Sort |

| Field | Details |
|--------------------|--|
| | <p>Description</p> <p>The page description. This field can be useful to describe the reason for creating the page or its intended use.</p> |
| DeveloperName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>The API name of the Lightning page.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| EntityDefinitionId | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The name of the standard object or ID of the custom object that the Lightning page is associated with. For Lightning pages of type <code>AppPage</code> or <code>HomePage</code>, this field is <code>null</code>.</p> <p>This field is available in API version 39.0 and later.</p> |
| FullName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Group, Nillable</p> <p>Description</p> <p>The full name of the associated FlexiPage object in Metadata API.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| ManageableState | <p>Type</p> <p>ManageableState enumerated list</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated |

| Field | Details |
|-----------------|--|
| | <ul style="list-style-type: none"> • deprecatedEditable • installed • installedEditable • released • unmanaged <p>This field is available in API version 38.0 and later.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The page's label.</p> |
| Metadata | <p>Type FlexiPageMetadata</p> <p>Properties Create, Nillable, Update</p> <p>Description Lightning page metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the package of which the FlexiPage is a part.</p> |
| ParentFlexiPage | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of the FlexiPage that this page inherits behavior from. Available in API version 37.0 or later.</p> |
| SubjectType | <p>Type string</p> |

| Field | Details |
|-------|--|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The object the Lightning page is associated with. For Lightning pages of type <code>AppPage</code> or <code>HomePage</code>, this field is <code>null</code>.</p> <p>Available in API version 37.0 and 38.0. Deprecated as of API version 39.0. Use <code>EntityDefinitionId</code> instead.</p> |
| Type | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklistSort</p> <p>Description Required. The type of the Lightning page. Valid values are:</p> <ul style="list-style-type: none"> • <code>CdpRecordPage</code>—A Lightning page that is used to override a <code>CDPNearCoreObject</code> record page in Lightning Experience. This value is available in API version 54.0 and later for orgs that have Data Cloud enabled. • <code>AppPage</code>—A Lightning page that is used as the home page for a custom app. • <code>CommAppPage</code>—A Lightning page that is used to represent a custom page, as created in the Experience Builder. This value is available in API version 37.0 and later. • <code>CommCheckoutPage</code>—A Lightning page that is used to create a B2B Commerce checkout, as created in the Experience Builder. This value is available in API version 46.0 and later. • <code>CommFlowPage</code>—A Lightning page used to override a flow page, as created in the Experience Builder. This value is available in API version 45.0 and later. • <code>CommForgotPasswordPage</code>—A Lightning page that's used to override a forgot-password page, as created in Experience Builder. This value is available in API version 39.0 and later. • <code>CommFlowPage</code>—An out-of-the-box flow page, as created in Experience Builder. This value is available in API version 45.0 and later. • <code>CommGlobalSearchResultPage</code>—A Lightning page used to override the global search result page, as created in Experience Builder. This value is available in API version 41.0 and later. • <code>CommLoginPage</code>—A Lightning page that's used to override the login page, as created in Experience Builder. This value is available in API version 39.0 and later. • <code>CommNoSearchResultsPage</code>—An Experience Builder site page for B2B searches that return no results. The URL for this page is <code>no-results/:term</code>. The page starts out empty. You can add any component to it that accepts parameters to achieve the desired "no results" experience. For example, you can place an HTML Editor component or CMS components for recommendations, banners, help, and support. This value is available in API version 48.0 and later. |

| Field | Details |
|-------|--|
| | <ul style="list-style-type: none"> • <code>CommObjectPage</code>—A Lightning page used to override an object page, as created in Experience Builder. This value is available in API version 38.0 and later. • <code>CommOrderConfirmationPage</code>—A Lightning page that is used to create a B2B Commerce order confirmation page in checkout, as created in the Experience Builder. This value is available in API version 46.0 and later. • <code>CommQuickActionCreatePage</code>—A Lightning page used to override the create record page, as created in Experience Builder. This value is available in API version 38.0 and later. • <code>CommRecordPage</code>—A Lightning page used to override a record page, as created in the Experience Builder. This value is available in API version 38.0 and later. • <code>CommRelatedListPage</code>—A Lightning page used to override a related list page, as created in the Experience Builder. This value is available in API version 38.0 and later. • <code>CommSearchResultPage</code>—A Lightning page used to override the search result page, as created in Experience Builder. This value is available in API version 38.0 and later. • <code>CommSelfRegisterPage</code>—A Lightning page used to override the self-registration page, as created in Experience Builder. This value is available in API version 39.0 and later. • <code>CommThemeLayoutPage</code>—A Lightning page used to override a theme layout page, as created in the Experience Builder. This value is available in API version 38.0 and later. • <code>EmbeddedServicePage</code> This value is available in API version 45.0 and later. • <code>EmailContentPage</code> — A page that contains the builder markup for your email content. When you edit email content in the builder, the FlexiPage object remembers where you put the components. Because they include builder markup, you can't retrieve or deploy FlexiPages when type is <code>EmailContentPage</code>. • <code>EmailTemplatePage</code> — A page that contains the builder markup for your email template. When you edit an email template in the builder, the FlexiPage object remembers where you put the components. Because they include builder markup, you can't retrieve or deploy FlexiPages when type is <code>EmailTemplatePage</code> or <code>EmailContentPage</code>. • <code>ForecastingPage</code> —A Lightning page that is used to override the default forecasts page in Lightning Experience. This value is available in API version 57.0 and later. • <code>HomePage</code>—A Lightning page that is used to override the Home page in Lightning Experience. This value is available in API version 37.0 and later. • <code>MailAppAppPage</code>—An email application pane used to override the default layout in the Outlook and Gmail integrations. This value is available in API version 38.0 and later. • <code>RecordPage</code>—A Lightning page used to override an object record page in Lightning Experience. This value is available in API version 37.0 and later. • <code>RecordPreview</code> A Lightning page used to override standard lookup previews when hovering over previewable records in Lightning Experience. This value is available in API version 45.0 and later. • <code>UtilityBar</code>—A Lightning page used as the utility bar in Lightning Experience apps. This value is available in API version 38.0 and later. |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> VoiceExtension—A Lightning page used to customize user interfaces and agent actions in the Omni-Channel widget for Service Cloud Voice. This value is available in API version 57.0 and later. <p>Available in API version 32.0 or later. In API versions 32.0 through 36.0, this field can only have a value of <code>AppPage</code>.</p> |

Sample Code

This code sample creates a Lightning page with a single Recent Items component, that shows recently used Accounts and `MyCustomObject__c`

```

ComponentInstance recentItems = new ComponentInstance();
recentItems.setComponentName("flexipage:recentItems");
ComponentInstanceProperty cip = new ComponentInstanceProperty();
cip.setName("entityNames");
cip.setValue("Account,MyCustomObject__c");
recentItems.setComponentInstanceProperties(new ComponentInstanceProperty[]{cip});

FlexiPageRegion mainRegion = new FlexiPageRegion();
mainRegion.setName("main");
mainRegion.setType(FlexiPageRegionType.Region);
mainRegion.setComponentInstances(new ComponentInstance[] { recentItems });

FlexiPageMetadata fpMetadata = new FlexiPageMetadata();
fpMetadata.setFlexiPageRegions(new FlexiPageRegion[]{mainRegion});
fpMetadata.setMasterLabel("My FlexiPage");
fpMetadata.setDescription("A FlexiPage with a recent items component");
fpMetadata.setType(FlexiPageType.AppPage);

FlexiPage flexiPage = new FlexiPage();
flexiPage.setFullName("MyFlexiPageDevName");
flexiPage.setMetadata(fp);

// Create
SaveResult saveResult = soapConnection.create(new SObject[] { flexiPage });

```

Flow

Use the Flow object to retrieve and update specific flow versions.

With Flow, you can create an application that navigates users through a series of screens to query and update records in the database. You can also execute logic and provide branching capability based on user input to build dynamic applications. For information about the corresponding UI-based flow building tool, see [Flow Builder](#) in Salesforce Help.

When using the Tooling API to work with flows, consider that:

-  **Note:** Legacy flows created with the Desktop Flow Designer can't be modified with the API. Update your flow by recreating it with Flow Builder.
- You can describe information for a flow installed from a managed package but not its metadata.

- Every time you update a flow version, you actually delete the existing flow version and create a flow version from it, with a new ID.
- To activate a flow, change the Status field to active.

You can delete a flow version as long as it isn't active and has no paused interviews. If the flow version has paused interviews, wait for those interviews to resume and finish, or delete them.

This object is available in API version 34.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

DELETE, GET, HEAD, PATCH, POST


Fields

| Field | Details |
|--------------|---|
| ApiVersion | Type double Properties Nillable Description The API version that defines the execution behavior of the flow. Available in API version 50.0 and later. |
| Definition | Type FlowDefinition Properties Filter, Group, Nillable, Sort Description This flow's definition object. |
| DefinitionId | Type ID Properties Filter, Group, Sort Description The ID of this flow's FlowDefinition. |
| Description | Type string |

| Field | Details |
|--------------|---|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description A description of the flow, such as what it's meant to do or how it works.</p> |
| Environments | <p>Type multipicklist</p> <p>Properties Filter, Nillable</p> <p>Description Indicates where a flow can run. Valid values are:</p> <ul style="list-style-type: none"> • Default—The flow can run offline or from a Visualforce component, Lightning page, flow action, or custom Aura component. • Slack—The flow can run in Slack and the default environment. You specify the Slack flow environment when you save the flow. <p>Available in API version 55.0 and later.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the flow in the Metadata API.</p> <p>A unique name for the flow that contains only underscores and alphanumeric characters. The name must be unique across the org, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> <p>To deploy or retrieve a version, you can specify the version number. For example, <code>sampleFlow-3</code> specifies version 3 of the flow whose unique name is sampleFlow. If you don't specify a version number, the flow is the latest version.</p> |
| IsTemplate | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the process or flow is a template. When installed from managed packages, processes and flows can't be viewed or cloned by subscribers because of intellectual property (IP) protection. But when those processes and flows are templates, subscribers can open them in a builder, clone them, and customize the clones. Available in API version 45.0 and later.</p> |

| Field | Details |
|-----------------|---|
| | Default: false |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> <p>Description Label for the flow. In the UI, this field is Flow Label.</p> |
| Metadata | <p>Type mns: Flow</p> <p>Properties Create, Nillable, Update</p> <p>Description The flow's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. If the flow is part of a managed package, this field is Null. Metadata isn't returned for flows in managed packages, unless the flows are templates.</p> |
| ProcessType | <p>Type Restricted picklist</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The type of the flow. Valid values are:</p> |


| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> • Appointments—A flow for Lightning Scheduler. This value is available in API version 44.0 and later. • AutoLaunchedFlow—A flow that doesn't require user interaction. • CheckoutFlow—A flow used in Lightning B2B Commerce to create a checkout in a store. This value is available in API version 48.0 and later. • ContactRequestFlow—A flow that lets customers request that customer support get back to them. This flow is used to create contact request records. This value is available in API version 45.0 and later. • CustomerLifecycle—A Salesforce Surveys flow that lets you associate survey questions with different stages in customer lifecycles. This value is available in API version 49.0 and later and only when the Customer Lifecycle Designer license is enabled. • CustomEvent—A process that is invoked when it receives a platform event message. In the UI, it's an event process. This value is available in API version 41.0 and later. • FieldServiceMobile—A flow for the Field Service mobile app. This value is available in API version 39.0 and later. • FieldServiceWeb—A flow for embedded Appointment Booking. Its UI label is Field Service Embedded Flow. This value is available in API version 41.0 and later. • Flow—A flow that requires user interaction because it contains one or more screens or local actions, choices, or dynamic choices. In the UI and Salesforce Help, it's a screen flow. Screen flows can be launched from the UI, such as with a flow action, Lightning page, or web tab. • FSLending—A flow for Financial Services Cloud Mortgage. This value is available in API version 46.0 and later. • FSLending—A flow for login. This value is available in API version 51.0 and later. • InvocableProcess—A process that can be invoked by another process or the Invocable Actions resource in REST API. This value is available in API version 38.0 and later. • LoyaltyManagementFlow—A flow for the Loyalty Management app and can be invoked by loyalty program processes. This value is available in API version 54.0 and later. • RoutingFlow—A flow for Salesforce Omni-Channel routing and other business logic. This value is available in API version 52.0 and later. • Survey—A flow for Salesforce Surveys. From the UI, this type of flow is created in Survey Builder. This value is available in API version 42.0 and later. • SurveyEnrich—A Salesforce Surveys flow that uses the Survey Data Mapper. From the UI, this type of flow is created in the Survey Builder and requires an associated survey flow type. This value is available in API version 49.0 or later and only when the Customer Lifecycle Designer license is enabled. • Workflow—A process that is invoked when a record is created or edited. In the UI and Salesforce Help, it's a record change process. <p>These values are reserved for future use.</p> <ul style="list-style-type: none"> • ActionCadenceFlow • ActionPlan • AppProcess |

| Field | Details |
|-----------|---|
| | <ul style="list-style-type: none"> • CartAsyncFlow • DigitalForm • Journey • JourneyBuilderIntegration • LoginFlow • ManagedContentFlow • OrchestrationFlow • RecommendationStrategy • SalesEntryExperienceFlow • TransactionSecurityFlow • UserProvisioningFlow <p> Note: This value has significant impact on validation when saving the flow and on the flow's runtime behavior. Don't change this value unless you understand the flow properties of the specified type.</p> <p>Across flow versions, you can change the type only from <code>Flow</code> to <code>AutoLaunchedFlow</code> or vice versa. Before you change the flow type, make sure that the flow contains only elements, resources, and functionality that the new flow type supports.</p> |
| RunInMode | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The mode that the flow runs in. Valid values are:</p> <ul style="list-style-type: none"> • <code>DefaultMode</code> — The flow version runs in system or user context, depending on how the flow is launched. • <code>SystemModeWithSharing</code> — The flow version always runs in system mode with sharing. The flow respects org-wide default settings, role hierarchies, sharing rules, manual sharing, teams, and territories. But it doesn't respect object permissions, field-level access, or other permissions of the running user. <p>Available in API version 48.0 and later.</p> |
| Status | <p>Type Restricted picklist</p> <p>Properties Filter, Group</p> <p>Description The flow's status.</p> <ul style="list-style-type: none"> • Active • Draft |


| Field | Details |
|-----------------------------|--|
| | <ul style="list-style-type: none"> • <code>Obsolete</code> • <code>InvalidDraft</code> |
| <code>TimeZoneSidKey</code> | <p>Type string</p> <p>Properties Nillable</p> <p>Description The ID that defines the time zone in which the flow runs. Available in API version 56.0 and later.</p> |
| <code>VersionNumber</code> | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description The flow's version number.</p> |

FlowDefinition


The parent of a set of flow versions.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.

When using the Tooling API to work with flow definitions, consider that:

 **Note:** Legacy flows created with the Desktop Flow Designer can't be modified with the API. Update your flow by recreating it with Flow Builder.

- You can activate and deactivate flows with the `Metadata` field.

 **Important:** In API version 44.0, we recommend upgrading your flows to flow metadata file names without version numbers and discontinue using the `FlowDefinition` object to activate or deactivate a flow. Then use the `Flow` object to activate or deactivate a flow. For more information, see [Upgrade Flow Files to API Version 44.0](#).

If you deploy with flow definitions, the active version numbers in the flow definitions override the `status` fields in the flows. For example, the active version number in the flow definition is version 3, and the latest version of the flow is version 4 with the `status` field as `Active`. After you deploy your flow, the active version is version 3.

- You can update `masterlabel` and `description` of a `FlowDefinition`.
- `FlowDefinition` are implicitly created when the `Flow` object is created, which means `FlowDefinition` objects can only be updated.

This object is available in API version 34.0 and later.

Supported SOAP API Calls

`query()`, `retrieve()`, `update()`

Supported REST API HTTP Methods

GET, HEAD, PATCH, POST

Fields

| Field Name | Details |
|-----------------|---|
| ActiveVersion | Type Flow Properties Filter, Group, Nillable, Sort Description The active flow version object. |
| ActiveVersionId | Type ID Properties Filter, Group, Nillable, Sort Description The ID of the active flow version. |
| Description | Type string Properties Nillable Description Flow definition information, specified by the org's admin. |
| DeveloperName | Type string Properties Filter, Group, Sort Description Developer name of this flow definition. In the UI, the label is Flow API Name. |
| FullName | Type string Properties Create, Group, Nillable Description The full name of the flow definition in the Metadata API. |

| Field Name | Details |
|-----------------|---|
| | <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| LatestVersion | <p>Type Flow</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The latest flow version object, regardless of the status.</p> |
| LatestVersionId | <p>Type ID</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the latest flow version, regardless of the flow's status.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged <p>This field is available in API version 38.0 and later.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Label for the flow definition. In the UI, this field's label is Flow Label.</p> |

| Field Name | Details |
|-----------------|---|
| Metadata | <p>Type</p> <p>mns : FlowDefinition</p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>The flow definition's metadata object, containing information about which flow version is active and the flow definition's description.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace associated with this flow definition.</p> |

FlowElementTestCoverage

Represents a flow element that was executed by a given Apex test method. Available in API version 44.0 and later.

Supported SOAP Calls

`query()`, `delete()`, `retrieve()`, `update()`

Supported REST HTTP Methods

GET, HEAD

Fields

| Field | Details |
|-------------|---|
| ElementName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The unique name of the flow element that's executed by the test method.</p> |

| Field | Details |
|--------------------|---|
| FlowTestCoverageId | Type ID Properties Filter, Group, Sort Description The ID of the parent FlowTestCoverage record. |
| FlowVersionId | Type ID Properties Filter, Group, Sort, Update Description The ID of the flow version that's executed by the test method. |

Usage

FlowElementTestCoverage records are deleted when changes are saved to the associated flow version.



Tip: A flow version corresponds to a process built in Process Builder or a flow built in Flow Builder. When you create a process, Salesforce names each element for you. To understand which criteria node or action corresponds with an element name, see [Troubleshoot Processes with Apex Debug Logs](#).

Sample Queries

Get the executed elements that were executed by any test

```
SELECT Id, Elementname, FlowTestCoverageId
FROM FlowElementTestCoverage
WHERE FlowVersionId='301RM0000004GiK'
```

Get the number of elements that were executed by any test


```
SELECT count_distinct(ElementName)
FROM FlowElementTestCoverage
WHERE FlowVersionId='301RM0000004GiK'
```


Get the names of the elements that were executed by any test

```
SELECT ElementName, count(Id)
FROM FlowElementTestCoverage
WHERE FlowVersionId='301RM0000004GiK'
GROUP BY ElementName
```

FlowTest (Beta)

Represents the description of a flow test associated with a flow definition. This object is available in API version 55.0 and later.

 **Note:** This feature is a Beta Service. Customer may opt to try such Beta Service in its sole discretion. Any use of the Beta Service is subject to the applicable Beta Services Terms provided at [Agreements and Terms](#).

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.


Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|---------------|--|
| Description | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description The description of the flow test. This field can be useful to describe the reason for creating the test or its intended use.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> |
| FullName | <p>Type string</p> |

| Field | Details |
|-----------------|---|
| | <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated FlowTest type in Metadata API. The full name can include a namespaceprefix.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the flow test.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Label for the flow test. In the UI, this field is Label.</p> |
| Metadata | <p>Type FlowTest</p> <p>Properties Create, Nillable, Update</p> <p>Description The flow test's metadata.</p> |

| Field | Details |
|-----------------|---|
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none">• In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer.• In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |

FlowTestCoverage

Represents test coverage for a flow or process by a given Apex method. Available in API version 44.0 and later.

Supported SOAP Calls

`delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`

Supported REST HTTP Methods

GET, HEAD

Fields

| Field | Details |
|-----------------|--|
| ApexTestClassId | <p>Type</p> <p>ID</p> <p>Properties</p> <p>Filter, Group, Sort, Update</p> <p>Description</p> <p>The ID of the Apex test class.</p> |

| Field | Details |
|-----------------------|--|
| FlowVersionId | <p>Type ID</p> <p>Properties Filter, Group, Sort</p> <p>Description The ID of the flow version that was executed by the test method.</p> |
| NumElementsCovered | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort, Update</p> <p>Description The number of elements that were executed by the test method.</p> |
| NumElementsNotCovered | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort, Update</p> <p>Description The number of elements that weren't executed by the test method.</p> |
| TestMethodName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort, Update</p> <p>Description The name of the Apex method that executed the flow version.</p> |

Usage

FlowTestCoverage records are deleted when changes are saved to the associated flow version.

A flow version corresponds to a process built in Process Builder or a flow built in Flow Builder. For a process, Apex tests execute only the active version. For a flow, Apex tests execute the active version. When a flow has no active version, Apex tests execute the latest version.



Tip: Make sure that **Deploy processes and flows as active** is enabled in your org's process automation settings. Otherwise, when you deploy active flows and processes via change sets or Metadata API, they're deployed as inactive.

To deploy a process or flow as active, your org must have 75% flow test coverage. To calculate your org's flow test coverage, Salesforce divides the number of covered flows and processes by the sum of the number of active processes and active autolaunched flows.

Sample Query

Get the names of all flows and processes that have test coverage.

```
SELECT FlowVersion.Definition.DeveloperName
FROM FlowTestCoverage
GROUP BY FlowVersion.Definition.DeveloperName
```

Get the names of all active autolaunched flows and processes that don't have test coverage.

```
SELECT Definition.DeveloperName
FROM Flow
WHERE Status = 'Active'
      AND (ProcessType = 'AutolaunchedFlow' OR ProcessType = 'Workflow' OR ProcessType =
'CustomEvent' OR ProcessType = 'InvocableProcess')
      AND Id NOT IN (SELECT FlowVersionId FROM FlowTestCoverage)
```

Get overall test coverage for a flow version.

```
SELECT Id, ApexTestClassId, TestMethodName, FlowVersionId, NumElementsCovered,
NumElementsNotCovered
FROM FlowTestCoverage
WHERE flowversionid='301RM0000004GiK'
```

ForecastingDisplayedFamily

Represents the product families that an admin chooses to allow forecasting on in Lightning Experience. Available in Tooling API version 40.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`, `retrieve()`,

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|-----------------|---|
| DisplayPosition | <p>Type</p> <p>int</p> <p>Properties</p> <p>Filter, Group, idLookup, Nillable, Sort</p> <p>Description</p> <p>The order in which product families are displayed on the forecasts page. Each value is unique to a product family.</p> |

| Field | Details |
|---------------|--|
| ProductFamily | Type picklist Properties Filter, Group, Sort Description The product family available to forecast on. Each product family is unique. |

ForecastingFilter

Represents the custom filter for including or excluding data from opportunity forecasts. This object is available in API version 55.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

As of Spring '20 and later, only standard users with the View All Forecasts permission OR Allow Forecasting permission OR delegated forecast manager status can access this object.

Fields


| Field | Details |
|---------------|---|
| DeveloperName | Type string Properties Filter, Group, Sort Description The developer name of the forecast filter. |
| FilterLogic | Type string |

| Field | Details |
|-------------------------|---|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The logic that controls the evaluation of conditions. Only AND is supported. For example, 1 AND 2 AND 3.</p> |
| ForecastingTypeId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description The ID of the forecast type. Can be linked only to forecast types created in Summer '21 and later. This is a relationship field.</p> <p>Relationship Name ForecastingType</p> <p>Relationship Type Lookup</p> <p>Refers To ForecastingType</p> |
| ForecastingTypeSourceId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description The ID of the forecast type source. Can be linked only to forecast type sources created in Summer '21 or later and with a forecast source definition with source object of 'Opportunity'. This is a relationship field.</p> <p>Relationship Name ForecastingTypeSource</p> <p>Relationship Type Lookup</p> <p>Refers To ForecastingTypeSource</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> |

| Field | Details |
|-------------|--|
| | Description The full name of the forecast filter. |
| Language | Type picklist Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort Description The language of the forecast filter. |
| MasterLabel | Type string Properties Filter, Group, Sort Description The label for this object, which displays in Setup. The label is in the default language locale for the organization. If there's no default language locale, the label is in en_US. |
| Metadata | Type ForecastingFilter Properties Create, Nillable, Update Description The metadata of the forecast filter. |

ForecastingFilterCondition

Represents the custom filter condition logic for including or excluding data from opportunity forecasts. This object is available in API version 55.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`


Special Access Rules

As of Spring '20 and later, only standard users with the View All Forecasts OR Allow Forecasting permission OR delegated forecast manager status can access this object.

Fields

| Field | Details |
|-------------------------------|---|
| DeveloperName | Type string Properties Filter, Group, Sort Description The developer name of the forecast filter condition. |
| FieldName | Type string Properties Filter, Group, Sort Description The name of the opportunity field to be filtered. |
| ForecastingFilterId | Type reference Properties Filter, Group, Sort Description The ID of the forecast filter. This is a relationship field. Relationship Name ForecastingFilter Relationship Type Lookup Refers To ForecastingFilter |
| ForecastingSourceDefinitionId | Type reference Properties Filter, Group, Sort Description The ID of the forecasting source definition. |

| Field | Details |
|-------------|--|
| | <p>This is a relationship field.</p> <p>Relationship Name ForecastingSourceDefinition</p> <p>Relationship Type Lookup</p> <p>Refers To ForecastingSourceDefinition</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the forecast filter condition.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the forecast filter condition.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The label for this object, which displays in Setup. The label is in the default language locale for the organization. If there's no default language locale, the label is in en_US.</p> |
| Metadata | <p>Type ForecastingFilterCondition</p> <p>Properties Create, Nillable, Update</p> <p>Description The metadata of the forecast filter condition.</p> |
| Operation | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> |

| Field | Details |
|-----------|---|
| | <p>Description</p> <p>The operator in the filter condition.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • <code>equals</code> • <code>greaterOrEqual</code>—greater than or equal to • <code>greaterThan</code> • <code>lessOrEqual</code>—less than or equal to • <code>lessThan</code> • <code>notEqual</code>—not equal to |
| SortOrder | <p>Type</p> <p>int</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>The index value for the condition. This value represents the condition in the <code>FilterLogic</code> field on the <code>ForecastingFilter</code> object. For example, 1.</p> |
| Value | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The value of the filter condition. If multiple values are specified, they must be separated by a comma delimiter.</p> <p> Note: If you have multiple currencies enabled, and add a custom filter on a currency field as part of your forecast type definition, the corporate currency at the time the filter was created is used. If you have a single currency enabled, the absolute value is used in your filter condition.</p> |

Usage

A forecast type can contain up to three filter conditions.

ForecastingSourceDefinition

Represents the object, measure, date type, and hierarchy that a forecast uses to project sales. This object is available in API version 52.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `POST`, `Query`

Fields

| Field | Details |
|---------------|--|
| CategoryField | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Name of the forecast category that is associated with the forecast type. Possible values are:</p> <ul style="list-style-type: none"> • <code>Opportunity.ForecastCategoryName</code> |
| DateField | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Field that is used for the forecast type's date type. For example, the <code>CloseDate</code> field on Opportunity is used for opportunity close date–based forecast types. Possible values are:</p> <ul style="list-style-type: none"> • <code>Opportunity.CloseDate</code> • <code>OpportunityLineItem.ServiceDate</code> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. The name of the forecasting source definition.</p> |
| FamilyField | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> |

| Field | Details |
|--------------|---|
| | <p>Description</p> <p>Use this field to group forecasts by product family.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • <code>Product2.Family</code> |
| FullName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Group, Nillable</p> <p>Description</p> <p>The full name of the forecasting source definition.</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>The language of the forecasting source definition.</p> |
| MasterLabel | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>Required. Controlling label for this forecasting source definition.</p> |
| MeasureField | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Field that is used for the forecast type's measure. For example, the <code>Amount</code> field on Opportunity is associated with revenue-based forecast types.</p> <p>Possible values are*:</p> <ul style="list-style-type: none"> • <code>Opportunity.Amount</code> • <code>Opportunity.Custom</code> • <code>Opportunity.TotalOpportunityQuantity</code> • <code>OpportunityLineItem.Custom</code> • <code>OpportunityLineItem.Quantity</code> • <code>OpportunityLineItem.TotalPrice</code> |

| Field | Details |
|-----------------|--|
| | <p>*Where <i>Custom</i> represents the name of the custom field that a forecast type's measure is based on. Example: Use the <code>Megawatts__c</code> custom field to forecast energy consumption.</p> |
| Metadata | <p>Type ForecastingSourceDefinition</p> <p>Properties Create, Nillable, Update</p> <p>Description The metadata of the forecasting source definition.</p> |
| SourceObject | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Required. Object associated with this forecasting source definition. Possible values are:</p> <ul style="list-style-type: none"> • Opportunity • OpportunityLineItem • Product2 |
| Territory2Field | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description For a territory-based forecast type, indicates the field that is used for territory information. For user role-based forecast types, this value is <code>null</code>.</p> |
| UserField | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Specifies who owns the forecast. Possible values are:</p> <ul style="list-style-type: none"> • Opportunity.OwnerId |

ForecastingType

Represents a forecast type. This object is available in API version 52.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|---------------|---|
| DateType | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Required. The date type that forecast amounts are based on. Possible values are:</p> <ul style="list-style-type: none">• <code>OLIMeasureCloseDateOnly—3</code>• <code>OpportunityCloseDate—0</code>• <code>ProductDate—1</code>• <code>ProductDateOnly—4</code>• <code>ScheduleDate—2</code>• <code>ScheduleDateOnly—5</code> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. The name of the forecast type.</p> |
| FullName | <p>Type string</p> |

| Field | Details |
|------------------------|--|
| | <p>Properties Create, Group, Nillable</p> <p>Description The full name of the forecast type.</p> |
| HasProductFamily | <p>Type boolean</p> <p>Properties Defaulted on create, Group</p> <p>Description Required. Indicates whether the forecast type includes product families (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the forecast type.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. Controlling label for this forecast type. This display value is the internal label that doesn't get translated.</p> |
| Metadata | <p>Type ForecastingType</p> <p>Properties Create, Nillable, Update</p> <p>Description The metadata of the forecast type.</p> |
| OpportunitySplitTypeId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description For a forecast type based on a split, the ID of the opportunity split type.</p> |

| Field | Details |
|--------------------------|---|
| | <p>This field is a relationship field.</p> <p>Relationship Name OpportunitySplitType</p> <p>Relationship Type Lookup</p> <p>Refers To OpportunitySplitType</p> |
| OpptyLineItemSplitTypeId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description For a forecast type based on an opportunity product split, the ID of the opportunity line item split type. This field is a relationship field. Available in API version 58.0 and later.</p> <p>Relationship Name OpptyLineItemSplitType</p> <p>Relationship Type Lookup</p> <p>Refers To OpptyLineItemSplitType</p> |
| RoleType | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Required. Indicates whether the role type has a ForecastingType, and if so, which ForecastingType. Possible values are:</p> <ul style="list-style-type: none"> • R—User role-based forecast type • T • Y—Territory2-based forecast type |
| Territory2ModelId | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description For a territory-based forecast type, the ID of the Territory2 model.</p> |

ForecastingTypeSource

Represents the mapping of a forecasting source definition to a forecast type. This object is available in API version 52.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `POST`, `Query`

Fields

| Field | Details |
|-------------------------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The developer name of the forecasting source definition.</p> |
| ForecastingSourceDefinitionId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description The ID of the forecasting source definition. This is a relationship field.</p> <p>Relationship Name ForecastingSourceDefinition</p> <p>Relationship Type Lookup</p> <p>Refers To ForecastingSourceDefinition</p> |
| ForecastingTypeId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> |

| Field | Details |
|--------------------------|--|
| | <p>Description The ID of the forecast type. Can be linked only to forecast types created in Summer '21 and later.</p> <p>This is a relationship field.</p> <p>Relationship Name ForecastingType</p> <p>Relationship Type Lookup</p> <p>Refers To ForecastingType</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the forecasting type source.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Restricted picklist, Sort</p> <p>Description The language of the forecasting type source.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. The controlling label for this forecasting type source.</p> |
| Metadata | <p>Type ForecastingTypeSource</p> <p>Properties Create, Nillable, Update</p> <p>Description The metadata of the forecasting source definition.</p> |
| ParentSourceDefinitionId | <p>Type reference</p> |

| Field | Details |
|---------------|---|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description For forecast types not based on the Opportunity object and not based on a custom measure, this value represents the ID of the parent ForecastingSourceDefinition of the linked ForecastingSourceDefinition. This is a relationship field.</p> <p>Relationship Name ParentSourceDefinition</p> <p>Relationship Type Lookup</p> <p>Refers To ForecastingSourceDefinition</p> |
| RelationField | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Represents the field that links the source objects of the parent ForecastingSourceDefinition to the child ForecastingSourceDefinition. Possible values are:</p> <ul style="list-style-type: none"> • OpportunityLineItem.OpportunityId • OpportunityLineItem.Product2Id |
| SourceGroup | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. Represents a grouping of forecast type source definitions.</p> |

FormulaFunction

Represents a function used when building a formula, including examples and uses. This object is available in Tooling API version 39.0 and later.

Supported SOAP Calls

`describeObjects()`, `query()`

Supported REST HTTP Methods

GET

Special Access Rules

In API version 45.0 and later, only users with the ViewSetup and Configuration permission can access FormulaFunction or FormulaFunctionCategory.

Fields

| Field | Details |
|---------------|---|
| Category | Type FormulaFunctionCategory Properties Filter, Group, Nillable, Sort Description TheFormulaFunctionCategory to which the formula belongs. |
| CategoryId | Type string Properties Filter, Group, Nillable, Sort Description The ID of the FormulaFunctionCategory. |
| Description | Type string Properties Filter, Group, Nillable, Sort Description Description of the formula function. |
| DurableId | Type string Properties Filter, Group, Nillable, Sort Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field. |
| ExampleString | Type string |

| Field | Details |
|-------------------------------|--|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Describes the function and what arguments you can use with it.</p> |
| IsAllowedInEntityContext | <p>Type boolean</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Removed. Indicates whether you can use the formula function on an Entity (<code>true</code>) or not (<code>false</code>). For example, you can't use the PRIORVALUE function in a custom Account formula field. This field is available in API versions 39.0 to 47.0. Use the FormulaFunctionAllowedType on page 429 object in API version 48.0 and later.</p> |
| IsAllowedInFlowContext | <p>Type boolean</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Removed. Indicates whether the formula function is allowed in a Flow (<code>true</code>) or not (<code>false</code>). This field is available in API versions 39.0 to 47.0. Use the FormulaFunctionAllowedType on page 429 object instead in API version 48.0 and later.</p> |
| IsAllowedInVisualforceContext | <p>Type boolean</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Removed. Indicates whether the formula function is allowed in Visualforce (<code>true</code>) or not (<code>false</code>). This field is available in API versions 39.0 to 47.0. Use the FormulaFunctionAllowedType on page 429 object instead in API version 48.0 and later.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The formula function label that appears in the user interface.</p> |
| Name | <p>Type string</p> |

| Field | Details |
|-------|--|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of the formula function.</p> |
| Types | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, RestrictedPicklist, Sort</p> <p>Description Allowed formula types for functions.</p> <p>This field is available in Tooling API version 48.0 and later.</p> |

FormulaFunctionCategory

| Field Name | Details |
|------------|---|
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| Functions | <p>Type QueryResult</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description A list of functions that belong to the FormulaFunctionCategory.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Label of the FormulaFunctionCategory that appears in the user interface.</p> |
| Name | <p>Type string</p> |

| Field Name | Details |
|------------|--|
| | Properties Filter, Group, Nillable, Sort |
| | Description Name of the FormulaFunctionCategory. |

Query Examples

To get all the functions in FormulaFunction using REST:

```
req.setEndpoint('http://instance.salesforce.com/services/data/v59.0/tooling/query?q=SELECT+label+FROM+FormulaFunction');
req.setMethod('GET');
```

To get the DurableID of a function category using SOQL:

```
SELECT DurableID FROM FormulaFunctionCategory
```

To get all the categories and their functions using SOQL:

```
SELECT Name, Label, (SELECT Name, Label, Description, ExampleString FROM Functions) FROM FormulaFunctionCategory
```

FormulaFunctionAllowedType

Represents the functions that are supported in the given formula context. Available in API version 48.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`

Supported REST HTTP Methods

GET

Special Access Rules

Only users with the ViewSetup and Configuration permission can access FormulaFunctionAllowedType.

Fields

| Field | Details |
|-----------|-----------------------|
| DurableId | Type string |

| Field | Details |
|------------|--|
| | Properties Filter, Group, Nillable, Sort Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field. |
| FunctionId | Type string Properties Filter, Group, Nillable, Sort Description Unique identifier for the supported function. |
| Type | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort Description The name of the formula type in which the function is supported. Possible values are: <ul style="list-style-type: none"> • FLOW • VALIDATION • VISUALFORCE |

FormulaOperator

Represents an operator used when building a formula, including examples and uses. This object is available in Tooling API version 39.0 and later.



Note: In API version 45.0 and later, only users with the “ViewSetup and Configuration” permission can access FormulaOperator.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|-----------|--|
| DurableId | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| Label | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The formula operator label that appears in the user interface.</p> |
| Name | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The name of the formula operator.</p> |
| Value | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The value of the formula operator.</p> |

Query Examples

To get all formula operators available in FormulaOperator:

```
req.setEndpoint('http://instance.salesforce.com/services/data/v59.0/tooling/query?q=SELECT+name,+label,+value+FROM+FormulaOperator');  
req.setMethod('GET');
```

To get formula operators by ID:

```
req.setEndpoint('http://instance.salesforce.com/services/data/v59.0/tooling/query?q=SELECT+name,+label,+value+FROM+FormulaOperator+WHERE+disabled=0');
req.setMethod('GET');
```

GlobalValueSet

Represents a set of values used by a global picklist. Available from API version 39.0 or later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP Calls

`create()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST HTTP Methods

Query, GET, POST, PATCH

Fields

| Field Name | Details |
|-------------|--|
| CustomValue | <p>Type CustomValue[]</p> <p>Properties Filter, Group, Sort</p> <p>Description A list of the global picklist values.</p> |
| Description | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description A picklist value's description. It's useful to include a description for a picklist value so the reason for creating it can be tracked. Limit: 255 characters.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> |

| Field Name | Details |
|-------------|---|
| | <p>Description</p> <p>The full name of the associated metadata object in the Metadata API.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> <p>Any global value set created in API version 57.0 or later automatically has the <code>__gvs</code> suffix appended to FullName. When you make any CRUD-based call with the GlobalValueSet type, you must append the suffix to the FullName field when you reference the type.</p> |
| MasterLabel | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> |
| Sorted | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p><code>True</code> if the picklist values are sorted alphabetically.</p> |

CustomValue Metadata

Metadata about the global value set is returned in the `CustomValue` field.

| Field | Type | Description |
|-------------|---------|---|
| Color | string | The color assigned to the picklist value when it's used in charts on reports and dashboards. The color is in hexadecimal format; for example, #FF6600. If a color isn't specified, it's assigned dynamically upon chart generation. |
| Default | boolean | Required. Indicates whether this value is the default selection for the global picklist and the custom picklists that share its picklist value set. This field is set to <code>true</code> by default. |
| Description | string | A picklist value's description. It's useful to include a description for a picklist value so the reason for creating it can be tracked. Limit: 255 characters. |
| IsActive | boolean | Indicates whether this value is active or inactive. The default value is <code>true</code> . Users can select only active values from a picklist. An API retrieve operation for global picklist values returns all active and inactive values in the picklist. But retrieving the values of a non-global, unrestricted picklist returns only the active values. |

| Field | Type | Description |
|-----------|--------|--|
| Label | string | The global picklist value's label, or API name. If you don't specify the label when creating a value, it defaults to the text of the picklist value (ValueName). The ValueName isn't used if you update the label. |
| ValueName | string | The text of the picklist value. |

Group

Represents a set of User records. Groups can contain individual users, other groups, or the users in a particular role or territory. In addition, groups can contain all users below a particular role or territory in the hierarchy. Available in Tooling API version 38.0 and later.

Supported SOAP Calls

`describeSObjects()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`


Supported REST HTTP Methods

GET


Special Access Rules

As of Spring '20 and later, only authenticated internal and external users with the View Setup and Configuration permission can access this object.

Fields

| Field | Details |
|---------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Corresponds to Group Name in the user interface.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance slows down while Salesforce generates one for each record.</p> <p>Only your Salesforce org's internal users can access this field.</p> |

| Field | Details |
|-------------------|--|
| DoesIncludeBosses | <p>Type boolean</p> <p>Properties Filter, Group, Sort</p> <p>Description Indicates whether records shared with users in this group are also shared with users higher in the role hierarchy (<code>true</code>) or not (<code>false</code>). This field is only available for public groups. This field corresponds to the Grant Access Using Hierarchies checkbox in Setup.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> <p>Description The name of the group. This value corresponds to the value of the Label field in the user interface.</p> |
| OwnerId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description The ID of the user who owns the group.</p> |
| RelatedId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the ID of the associated records. For example, for Groups of type "Role," this field is the ID of the associated UserRole. The <code>RelatedId</code> field is polymorphic.</p> |
| Type | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Type of the group. One of the following values:</p> <ul style="list-style-type: none"> • <code>AllCustomerPortal</code>—All your Customer Portal or Customer Community Plus users. This type is only available when a Customer Portal or a Customer Site is enabled for your org. • <code>CollaborationGroup</code>—Chatter group. |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> • Manager—Public group that includes a user's direct and indirect managers. This Group is read-only. • ManagerAndSubordinatesInternal—Public group that includes a user and the user's direct and indirect reports. This group is read-only. • Organization—Public group that includes all the User records in the organization. This group is read-only. • PRMOrganization—Public group that includes all the partners in an organization that has the partner site or portal feature enabled. • Queue—Public group that includes all the User records that are members of a queue. • Regular—Standard Public Group. When you create a group through the <code>create()</code> call, its type must be <code>Regular</code>, unless a site or partner portal is enabled for the org. If so, the type can be <code>Regular</code> or <code>PRMOrganization</code>. • Role—Public Group that includes all the User records in a particular <code>UserRole</code>. • RoleAndSubordinates—Public Group that includes all the User records in a particular <code>UserRole</code> and all the User records in any subordinate <code>UserRole</code>. • SharingRuleGroup—Group associated with a criteria-based sharing rule. • Territory—Public Group that includes all the User records in a particular <code>Territory</code>. • TerritoryAndSubordinates—Public Group that includes all the User records in a particular <code>Territory</code> and all the User records in any subordinate <code>Territory</code>. <p> Note: The original territory management feature is now unavailable. For more information, see The Original Territory Management Module Will Be Retired in the Summer '21 Release. The information in this topic applies to the original territory management feature only, and not to Enterprise Territory Management.</p> <p>Only <code>Regular</code> can be used when creating a group. The other values are reserved for system-managed groups.</p> |

GtwyProvPaymentMethodType

Represents a type that allows integrators and payment providers to choose an active payment to receive an order's payment data rather than allowing the Salesforce Order Management platform to select a default payment method. This object is available in API version 50.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`



Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

To access Commerce Payments entities, your org must have a Salesforce Order Management license with the Payment Platform org permission activated. Commerce Payments entities are available only in Lightning Experience.

Fields

| Field | Details |
|---------------|--|
| Comments | <p>Type textarea</p> <p>Properties Filter, Nillable, Sort</p> <p>Description Additional details about the gateway provider payment method type record. Max length is 1000 characters.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, Salesforce generates one for each record, which slows performance.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| Fullname | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated gatewayProviderPaymentMethodType in Metadata API. The full name can include a namespaceprefix.</p> |

| Field | Details |
|-------------------------------|---|
| | <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| GtwyProviderPaymentMethodType | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Links the Salesforce payment method to the payment method used in the Salesforce Order Management storefront. Your payment gateway integration uses this field when finding a payment method to link to a payment.</p> <p>The value of GtwyProviderPaymentMethodType must match the payment method value sent to the order's Payment Instrument in Salesforce Order Management.</p> <p>Here are examples of payment method values that Salesforce could receive from Salesforce Order Management.</p> <ul style="list-style-type: none"> • CREDIT_CARD • BASIC_CREDIT • CreditCard • GooglePay • ApplePay |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the payment gateway integration.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The timestamp when the current user last viewed this record or list view. A null value may mean that the user only accessed this record or list view (LastReferencedDate) but did not view it.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> |

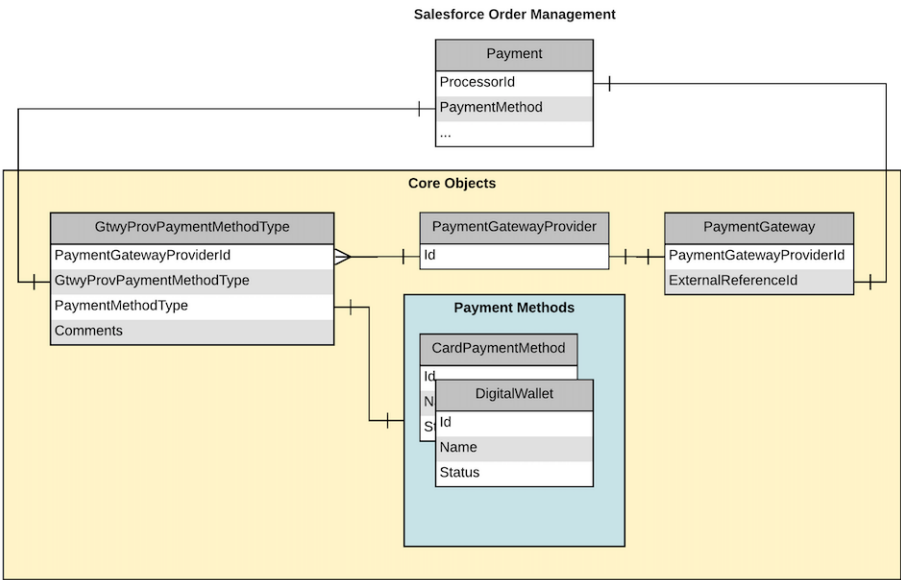
| Field | Details |
|-----------------|--|
| | <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, idLookup, Sort</p> <p>Description</p> <p>Required. Label for the GtwyProvPaymentMethodType. In the UI, this field is Gateway Provider Payment Method Type.</p> |
| Metadata | <p>Type</p> <p>GatewayProviderPaymentMethodType</p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>Metadata associated with the gateway provider payment method type.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. |

| Field | Details |
|--------------------------|--|
| | <p>In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer.</p> <ul style="list-style-type: none"> In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |
| PaymentGatewayProviderId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Specifies the payment gateway provider that Salesforce Order Management should use when processing payments. One payment gateway provider can be related to multiple payment method types. This is a relationship field.</p> <p>Relationship Name PaymentGatewayProvider</p> <p>Relationship Type Lookup</p> <p>Refers To PaymentGatewayProvider</p> |
| PaymentMethodType | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Specifies the type of payment method used on an order in Salesforce Order Management. Possible values are:</p> <ul style="list-style-type: none"> AlternativePaymentMethod CardPaymentMethod DigitalWallet |
| RecordTypeId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the record type entity related to the gateway provider payment method type. This is a relationship field.</p> |

| Field | Details |
|-------|--|
| | Relationship Name RecordType |
| | Relationship Type Lookup |
| | Refers To RecordType |

Usage

The Salesforce Order Management payment record must have a `ProcessorId` field with the same value as the payment gateway's `ExternalReferenceId` field. The gateway provider payment method type record must have a `PaymentMethodType` field that looks up to the payment method that you want to relate to your payment. Finally, the payment gateway and gateway provider payment method type must have matching `PaymentGatewayProviderId` fields. After you establish these relationships, the payment record infers your payment method from the gateway provider payment method type record.



HeapDump

A complex type that represents a heap dump in an `ApexExecutionOverlayResult` object. Available from API version 28.0 or later.

Fields

| Field | Details |
|---------------------------|---|
| <code>className</code> | Type string Description The name of the Apex class or trigger. |
| <code>extents</code> | Type array of TypeExtent Description TypeExtent includes the following fields: <ul style="list-style-type: none">• <code>collectionType</code>• <code>count</code>• <code>definition</code> (array of AttributeDefinition)• <code>extent</code> (array of HeapAddress)• <code>totalSize</code>• <code>typeName</code> |
| <code>heapDumpDate</code> | Type dateTime Description The date and time that the heap dump was captured. |
| <code>namespace</code> | Type string Description The namespace of the Apex class or trigger. Null if there is no namespace. |

Usage

Use heap dumps to capture structured debugging information.

HistoryRetentionJob

Represents the body of retained data from the archive, and the status of the archived data. Available in API version 29.0 or later.

Supported SOAP API Calls

`describeSObjects()`, `query()`

Supported REST API HTTP Methods

GET

Fields

| Field Name | Details |
|----------------------|--|
| DurationSeconds | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description How many seconds the field history retention job took to complete (whether successful or not).</p> |
| HistoryType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The object type that contains the field history that you retained. Valid values for standard objects are:</p> <ul style="list-style-type: none">• Account• Case• Contact• Leads• Opportunity <p>For custom objects, use the object name.</p> |
| NumberOfRowsRetained | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The number of field history rows that a field history retention job has retained.</p> |
| RetainOlderThanDate | <p>Type dateTime</p> <p>Properties Filter, Sort</p> <p>Description The date and time before which all field history data was retained.</p> |

| Field Name | Details |
|------------|---|
| StartDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The start date of the field history retention job.</p> |
| Status | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Provides the status of the field history retention job. By default, field history tracking copies data to the archive, leaving a duplicate of the archived data in Salesforce. You can delete data from Salesforce manually after it's archived. Status can include:</p> <ul style="list-style-type: none"> • CopyScheduled • CopyRunning • CopySucceeded • CopyFailed • CopyKilled • NothingToArchive • DeleteScheduled • DeleteRunning • DeleteSucceeded • DeleteFailed • DeleteKilled |

HomePageComponent

Represents a home page component.

This object is available in API version 35.0 and later.

Supported SOAP Calls

`query()`, `retrieve()`, `search()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|-----------------|--|
| Body | <p>Type string</p> <p>Properties Nillable</p> <p>Description If this component is an HTML page component, this field is the body of the HTML.</p> |
| Height | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Required for Visualforce Area components. Indicates the height (in pixels) of the component.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none">• beta• deleted• deprecated• deprecatedEditable• installed• installedEditable• released• unmanaged |
| Name | <p>Type string</p> <p>Properties Filter, Group, idLookup, Namefield, Sort</p> <p>Description The name of the home page component.</p> |

| Field | Details |
|-----------------|--|
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description A unique string to distinguish this type from any others. |
| ShowLabel | Type boolean Properties Defaulted on create, Filter, Group, Sort Description ID of the home page layout. |
| ShowScrollbars | Type boolean Properties Defaulted on create, Filter, Group, Sort Description ID of the home page layout. |

HomePageLayout

Represents a home page layout.

This object is available in API version 35.0 and later.

Supported SOAP Calls

`query()`, `retrieve()`, `search()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|-------|-----------------------|
| Id | Type string |

| Field | Details |
|-----------------|---|
| | <p>Properties Defaulted on create, Filter, Group, idLookup, Sort</p> <p>Description ID of the home page layout.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Name | <p>Type string</p> <p>Properties Filter, Group, idLookup, Namefield, Sort</p> <p>Description The home page layout name.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description A unique string to distinguish this type from any others.</p> |

IconDefinition

Represents an icon, such as used for a tab. Available in API version 43.0 and later.



Note: In API version 45.0 and later, only users with the “ViewSetup and Configuration” permission can access IconDefinition.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

Query, GET

Fields

| Field Name | Details |
|-----------------|---|
| ContentType | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The tab icon's content type, for example, <code>image/png</code>.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| Height | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Height of the icon in pixels. If the icon content type is SVG, the <code>Height</code> and <code>Width</code> values are not used.</p> |
| TabDefinitionId | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The ID of the tab this definition belongs to. Defaults to null.</p> |

| Field Name | Details |
|------------|--|
| Theme | Type string Properties Filter, Group, Nillable, Sort Description The user interface theme this definition is associated with. |
| Url | Type string Properties Filter, Group, Nillable, Sort Description The fully qualified URL for this icon. The default icon is a cloud. |
| Width | Type int Properties Filter, Group, Nillable, Sort Description The icon's width in pixels. If the icon content type is SVG, the Height and Width values are not used. |

InboundNetworkConnection

Represents the a private connection between a third-party data service and a Salesforce org. The connection is inbound because the callouts are coming *into* Salesforce.. Available in API version 49.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObject()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETEGETPATCHPOST

Fields

| Field | Details |
|----------------|-------------------------|
| ConnectionType | Type picklist |

| Field | Details |
|---------------|---|
| | <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Required. Specifies the Cloud provider of the connection. The only valid value is <code>AwsPrivateLink</code>.</p> |
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Required. A description of the connection. Maximum of 255 characters.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The developer's internal name for the inbound network connection used in the API.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated type in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| isActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Required. Specifies whether the connection is active (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code></p> |
| Language | <p>Type string</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> |

| Field | Details |
|-----------------|---|
| | Description The language of the connection. The value for this field is the language value of the org. |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort Description Indicates the manageable state of the specified component that is contained in a package: <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | Type string Properties Filter, Group, Sort Description The internal label for the connection. |
| Metadata | Type mns:InboundNetworkConnection Properties Create, Nillable, Update Description Provides access to the associated type and related fields in Metadata API. |
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description The namespace of the connection. An inbound network connection can be in an extension namespace different than the object. |

| Field | Details |
|--------|---|
| Status | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Restricted Picklist, Sort</p> <p>Description</p> <p>Required. Connection status. The connection is initially <code>Unprovisioned</code> and moves through the other states automatically after an admin performs a provision, sync, or teardown action. The valid values are:</p> <ul style="list-style-type: none">• <code>Unprovisioned</code>• <code>Allocating</code>• <code>PendingAcceptance</code>• <code>PendingActivation</code>• <code>RejectedRemotely</code>• <code>DeletedRemotely</code>• <code>TeardownInProgress</code>• <code>Ready</code> |

InboundNetworkConnProperty

Represents a name-value pair that describes the properties of the inbound network connection. Available in API version 49.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObject()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `QUERY`

Fields

| Field | Details |
|----------------------------|--|
| InboundNetworkConnectionId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Sort</p> <p>Description</p> <p>Required. The ID of the corresponding InboundNetworkConnection on page 449.</p> |

| Field | Details |
|---------------|---|
| PropertyName | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description The name of a property used to establish an InboundNetworkConnection. Valid values are:</p> <ul style="list-style-type: none"> • <code>AwsVpcEndpointId</code>—The unique endpoint ID for connections to an AWS Virtual Private Cloud (VPC). • <code>Region</code>—The region in which the VPC is hosted. • <code>SourceIpRanges</code>—The ranges of source IP address allocated to this inbound connection by the Salesforce-managed VPC in your cloud provider. |
| PropertyValue | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description The value of the <code>PropertyName</code>. An example of the <code>PropertyValue</code> of <code>Region</code> is <code>us-west-2</code>.</p> <p>The <code>PropertyValue</code> of <code>SourceIpRanges</code> is a JSON string that lists the start and end IP address for each range. This example shows two IP address ranges.</p> <pre>[{ "startIp": "10.10.10.0", "endIp": "10.10.10.3" }, { "startIp": "100.100.100.0", "endIp": "100.100.100.15" }]</pre> |

Index

Represents the index defined within a custom big object. Available in Tooling API version 41.0 and later.

Supported SOAP Calls

`query()`, `retrieve()`

Supported REST HTTP Methods

Query, GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|-----------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description This name is used to refer to the big object in the user interface. Available API version 41.0 and later.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed |

| Field | Details |
|-----------------|---|
| | <ul style="list-style-type: none"> installedEditable released unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Master label for the Index. This internal label doesn't get translated.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description A unique string to distinguish this type from any others.</p> |
| SubjectType | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The type of standard object that this record type is derived from. In this case, the parent big object.</p> |
| Type | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The type of index. Valid values are PRIMARY or SECONDARY.</p> |

Usage

REST GET

```
{
  "attributes" : {
    "type" : "Index",
    "url" : "/services/data/v41.0/tooling/subjects/Index/0c0D00000000GUIAY"
  },
  "Id" : "0c0D00000000GUIAY",
}
```

```
"SubjectType" : "01ID0000000AwIcMAK",
"DeveloperName" : "BigObject_PK",
"MasterLabel" : "BigObject_PK",
...
"Type" : "PRIMARY"
}
```

IndexField

Represents the fields in the index of a custom big object. Available in Tooling API version 41.0 and later.

Supported SOAP Calls

`query()`, `retrieve()`.

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|---------|--|
| FieldId | Type reference Properties Filter, Group, Sort Description ID of the custom field definition. |
| Id | Type ID Properties Filter, Group, Sort Description ID of the custom index field. |
| IndexId | Type reference |

| Field | Details |
|-----------------|---|
| | Properties Filter, Group, Sort Description ID of the custom index. |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort Description Indicates the manageable state of the specified component that is contained in a package: <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Ordinal | Type int Properties Filter, Group, Sort Description The field's position in the index. Used to determine the order of the fields in the index. |
| SortDirection | Type picklist Properties Filter, Group, Restricted picklist, Sort Description The sort direction of the field in the index. Valid values are <code>ASC</code> for ascending order and <code>DESC</code> for descending order. |

InstalledSubscriberPackage

Represents a package (first- or second-generation) that is installed in a subscriber's org. Available in API version 41.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

`GET`, `Query`

Fields

| Field | Details |
|----------------------------|--|
| MinPackageVersionId | <p>Type</p> <p>ID</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Package version ID (foreign key) of the first version of the package that was installed in the org. Starts with 04t.</p> |
| SubscriberPackageId | <p>Type</p> <p>ID</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>ID of the subscriber package. Starts with 033.</p> |
| SubscriberPackageVersionId | <p>Type</p> <p>ID</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>ID that shows the currently installed package version. Starts with 04t.</p> |

Usage

Query InstalledSubscriberPackage for details about the packages that are installed in your org. Sample SOQL query:

```
SELECT Id, SubscriberPackageId, SubscriberPackage.NamespacePrefix,
       SubscriberPackage.Name, SubscriberPackageVersion.Id,
       SubscriberPackageVersion.Name, SubscriberPackageVersion.MajorVersion,
       SubscriberPackageVersion.MinorVersion,
       SubscriberPackageVersion.PatchVersion,
       SubscriberPackageVersion.BuildNumber
```

```
FROM InstalledSubscriberPackage
ORDER BY SubscriberPackageId
```

InstalledSubscriberPackageVersion

Deprecated and slated for removal. Represents a package version (first- or second-generation) that is installed in a subscriber's org. Available in API version 41.0 and later.



Warning: This object is not currently in use. It will be removed in a future release.

Supported SOAP Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

`GET`, `Query`

Fields

| Field | Details |
|----------------------------|---|
| MinPackageVersionId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Package version ID (foreign key) of the first version of the package that was installed in the org.</p> |
| SubscriberPackageId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description ID of the subscriber package.</p> |
| SubscriberPackageVersionId | <p>Type reference</p> <p>Properties Filter, Group, Sort, Unique</p> <p>Description ID of the subscriber package version.</p> |

IPAddressRange

Represents a range of IP addresses to include in or exclude from the specified feature.


Supported SOAP API Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|---------------|---|
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Not required. The description of the IP address range. For example, the name of the company that owns the IP address range.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the IP address range.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| EndAddress | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The end of the IP address range.</p> |
| FullName | <p>Type string</p> |

| Field | Details |
|---------------------|---|
| | <p>Properties Create, Group, Nillable</p> <p>Description The unique name used as the event delivery identifier for API access. The fullName can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> |
| IpAddressFeature | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Restricted picklist, Sort</p> <p>Description The feature that uses the range of IP addresses. Possible values are:</p> <ul style="list-style-type: none"> • EmailIpFiltering (default) —Filter email engagement activities such as email opens and email clicks. |
| IpAddressUsageScope | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Restricted picklist, Sort</p> <p>Description Whether the specified IP addresses are included or excluded. Possible values are:</p> <ul style="list-style-type: none"> • Exclusion • Inclusion |
| isProtected | <p>Field Type boolean</p> <p>Description Whether the specified IP address range is protected. The default is <code>false</code>.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Master label for the IP address range. This internal label doesn't get translated.</p> |
| Metadata | <p>Type complexvalue</p> <p>Properties Create, Nillable, Update</p> |

| Field | Details |
|--------------|---|
| | Description The IP address range metadata. |
| StartAddress | Type string Properties Filter, Group, Sort Description The start of the IP address range. |

Usage

Specify a range of IP addresses, which feature the range applies to, and whether the IP addresses are excluded from or included in the feature.



Example: Exclude your coworkers' email opens and clicks from your email engagement reports. Use `StartAddress` and `EndAddress` to define the range of IP addresses that your company owns. Set `IpAddressFeature` to `EmailIpFiltering`, and set `IpAddressUsageScope` to `Exclusion`.

KeywordList

Represents a list of keywords used in Experience Cloud site moderation. Available in Tooling API version 36.0 and later.

This keyword list is a type of moderation criteria that defines offensive language or inappropriate content that you don't want in your Experience Cloud site.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|-------------|---|
| Description | Type textarea Properties Filter, Nillable, Sort. |

| Field | Details |
|---------------|---|
| | Description A description of the keyword list. |
| DeveloperName | Type string Properties Filter, Group, Namefield, Sort Description The developer's internal name for the keyword list used in the API. |
| FullName | Type string Properties Create, Group, Nillable. Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |
| Language | Type picklist Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort. Description The language of the keyword list. Valid values are: <ul style="list-style-type: none"> Chinese (Simplified): zh_CN Chinese (Traditional): zh_TW Danish: da Dutch: nl_NL English: en_US Finnish: fi French: fr German: de Italian: it Japanese: ja Korean: ko Norwegian: no Portuguese (Brazil): pt_BR Russian: ru |

| Field | Details |
|--------------------------|--|
| | <ul style="list-style-type: none"> Spanish: <code>es</code> Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: <code>sv</code> Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |
| <code>MasterLabel</code> | <p>Type string</p> <p>Properties Filter, Group, Sort.</p> <p>Description Label for the keyword list.</p> |
| <code>Metadata</code> | <p>Type <code>mns:KeywordList</code></p> <p>Properties Create, Nillable, Update.</p> <p>Description KeywordList metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

Layout

Represents a page layout.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|---------------------------------|-------------------------------|
| <code>EntityDefinitionId</code> | <p>Type string</p> |

| Field | Details |
|-----------------|---|
| | <p>Properties Filter, Group, Sort</p> <p>Description The Id of the EntityDefinition object associated with this object.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The unique name of the layout used as the identifier for API access. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| LayoutType | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Indicates the type of the layout. Valid values are:</p> <ul style="list-style-type: none"> • <code>GlobalQuickActionList</code> • <code>ProcessDefinition</code> • <code>Standard</code> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> • <code>installedEditable</code> • <code>released</code> |

| Field | Details |
|---------------------------|---|
| | <ul style="list-style-type: none"> unmanaged |
| Metadata | <p>Type mns : Layout</p> <p>Properties Create, Nillable, Update</p> <p>Description Layout metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, idLookup, Nillable, Sort</p> <p>Description The layout name.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description A unique string to distinguish this layout from any others. For example, if this layout is being using by a flow, use the <code>NamespacePrefix</code> to uniquely identify the layouts in multiple flow instances.</p> |
| ShowSubmitAndAttachButton | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Only allowed on Case layout. If true, Submit & Add Attachment displays on case edit pages to portal users in the Customer Portal.</p> |
| TableEnumOrId | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The enum (for example, Account) or ID of the object this layout is on.</p> |

LightningComponentBundle

Represents a Lightning web component bundle. A bundle contains a Lightning web component and its related resources. Available in API version 45.0 and later.

Supported SOAP API Calls



`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|---------------|--|
| ApiVersion | <p>Type double</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The API version for this bundle. Every bundle has an API version specified at creation.</p> |
| Description | <p>Type textarea</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The text description of the bundle. Maximum size of 255 characters.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the record in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated but you can supply your own value if you create the record using the API.</p> |

| Field Name | Details |
|------------------|---|
| | <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance slows down while Salesforce generates one for each record.</p> <p> Note: Only users with View <code>DeveloperName</code> OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The unique name used as the <code>LightningComponentBundle</code> identifier for API access. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsExplicitImport | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether imports between files are done explicitly by the developer (<code>true</code>) or implicitly by the framework (<code>false</code>).</p> |
| IsExposed | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether a component is usable in a managed package (<code>true</code>) or not (<code>false</code>).</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the <code>MasterLabel</code>.</p> |

| Field Name | Details |
|-----------------|---|
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Master label for the Lightning bundle. This internal label doesn't get translated.</p> |
| Metadata | <p>Type <code>mns:LightningComponentBundle</code></p> <p>Properties Create, Nillable, Update</p> <p>Description The LightningComponentBundle metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15</p> |

| Field Name | Details |
|---------------|--|
| | <p>characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |
| TargetConfigs | <p>Type</p> <p>textarea</p> <p>Properties</p> <p>Nullable</p> <p>Description</p> <p>Configurations for each target. Each target is a Lightning page type that can be configured in Lightning App Builder.</p> |

Usage

For more information about Lightning web components, see [Lightning Web Components Developer Guide](#).

LightningComponentResource

Represents a Lightning web component resource, such as HTML markup, JavaScript code, a CSS file, an SVG resource, or an XML configuration file. Available in API version 45.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Special Access Rules

As of Summer '20 and later, only your Salesforce org's internal users can access this object.

Fields

| Field Name | Details |
|----------------------------|--|
| FilePath | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The path to the resource.</p> |
| Format | <p>Type picklist</p> <p>Properties Create, Filter Group, Restricted picklist, Sort, Update</p> <p>Description The format of the resource. The possible values are:</p> <ul style="list-style-type: none"> • css • html • js • json • svg • xml |
| LightningComponentBundleId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The ID of the bundle containing the resource.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable |

| Field Name | Details |
|------------|--|
| | <ul style="list-style-type: none"> installed installedEditable released unmanaged <p>This field is available in API version 38.0 and later.</p> |
| Source | <p>Type textarea</p> <p>Properties Create, Update</p> <p>Description The contents of the definition. This is all the markup or code for the definition.</p> |

Usage

For more information about Lightning web components, see [Lightning Web Components Developer Guide](#).

LookupFilter

Represents a lookup filter, which restricts the valid values and lookup dialog results for lookup, master-detail, and hierarchical relationship fields.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Available from Tooling API version 34.0 or later.



Note: LookupFilter is not supported on the article type object.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Fields

| Field Name | Details |
|-----------------|--|
| Active | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the lookup filter is active.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Namefield, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name.</p> |
| FullName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsOptional | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Required. If <code>true</code>, the lookup filter is optional.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> |

| Field Name | Details |
|-------------------------|--|
| | <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Metadata | <p>Type LookupFilter</p> <p>Properties Create, Nillable, Update</p> <p>Description The metadata for this lookup filter. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the custom field, which is sometimes different from the object's namespace.</p> |
| SourceFieldDefinition | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The field that this filter applies to.</p> |
| SourceFieldDefinitionId | <p>Type string</p> |

| Field Name | Details |
|---------------------------------------|---|
| | Properties Filter, Group, Sort Description Durable ID of the object specified in <code>SourceFieldDefinition</code> . |
| <code>SourceObject</code> | Type string Properties Filter, Group, Sort Description The object that contains the lookup field that uses this lookup filter. Null if the lookup filter doesn't reference fields on the source object. |
| <code>TargetEntityDefinition</code> | Type EntityDefinition Properties Filter, Group, Sort Description The entity definition for the source lookup field. |
| <code>TargetEntityDefinitionId</code> | Type string Properties Filter, Group, Sort Description ID of the <code>TargetEntityDefinition</code> . |



Example: The `Owner` field on `Account` represents a user with certain characteristics.

In this example, `SourceFieldDefinition` is `Account.Owner` and `TargetEntityDefinition` is `User`, because `Owner` is a lookup field to `User`.

LookupFilter Metadata

Metadata about the lookup filter is returned in the `Metadata` field:

| Field | Type | Description |
|----------------------------|---------|---|
| <code>active</code> | boolean | Required. If <code>true</code> , the lookup filter is active. |
| <code>booleanFilter</code> | string | The filter logic, if any, applied to this filter using Boolean operators AND, OR, or NOT. |

| Field | Type | Description |
|--------------|----------------------------|---|
| description | string | A description of the filter does. |
| errorMessage | string | If the lookup filter fails, the error m. |
| filterItems | FilterItem | Required. The set of filter conditions. Each lookup filter can have up to 10 FilterItems. |
| infoMessage | string | Information displayed on the page to help the user. For example, explaining why some items are excluded in the lookup filter. |
| isOptional | boolean | Required. If <code>true</code> , the lookup filter is optional. |

FilterItem Metadata

Represents one entry in a set of filter criteria.

| Field | Type | Description |
|------------|--|--|
| field | string | Represents the field specified in the filter. |
| operation | FilterOperation, an enumeration of strings | Valid values: <ul style="list-style-type: none">• <code>equals</code>• <code>notEqual</code>• <code>lessThan</code>• <code>greaterThan</code>• <code>lessOrEqual</code>• <code>greaterOrEqual</code>• <code>contains</code>• <code>notContain</code>• <code>startsWith</code>• <code>includes</code>• <code>excludes</code>• <code>within</code> (DISTANCE criteria only) |
| value | string | Represents the value of the filter item being operated upon. For example, if the filter is <code>my_number_field__c > 1</code> , the value of this field is 1. |
| valueField | string | Specifies if the final column in the filter contains a field or a field value. Approval processes don't support this field in filter criteria. |

ManagedContentType

Represents standard and custom content node types created for use with your org. Available in API version 47.0 and later.

Supported SOAP Calls

`query()`, `retrieve()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|--------------------------|--|
| HelpText | <p>Type textarea</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Provides assistive text in the UI, displayed as an info bubble for the field. If this field is empty, no info bubble icon or text is displayed.</p> |
| NodeLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Declares the label for the field as it appears in the UI.</p> |
| NodeName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Unique name of the <code>NodeType</code> within the content type. <code>NodeName</code> is a simple text field that allows up to 100 alphanumeric characters and underscores. The name must begin with a letter, not include spaces, can't have two consecutive underscores, and can't end with an underscore.</p> |
| NodeOptionsIsLocalizable | <p>Type boolean</p> <p>Properties Filter</p> <p>Description Declares a field as localizable so it's exported (<code>true</code>) or not (<code>false</code>) by the content translation service in the Digital Experiences app. Default is <code>false</code>.</p> |

| Field | Details |
|-----------------------|---|
| NodeOptionsIsRequired | <p>Type boolean</p> <p>Properties Filter</p> <p>Description Declares a field as required (<code>true</code>) or not (<code>false</code>). Fields declared as a required are indicated by a red asterisk. If a value isn't added to the field, the form can't be saved and a standard error is displayed. Default is <code>false</code>.</p> |
| NodeType | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Identifies the supported type of content in the node. Passed as a string. There's a maximum of 15 node types per content type. Valid values are:</p> <ul style="list-style-type: none"> • <code>TEXT</code>—Simple text node (maximum length 255 characters) • <code>MTEXT</code>—Multi-line text node (maximum length 2000 characters) • <code>RTE</code>—Rich text node (maximum length 65536 characters) • <code>IMG</code>—Image node • <code>URL</code>—URL node (maximum length 255 characters) URL accepts protocol string values starting with <code>http://</code>, <code>https://</code>, <code>mailto:</code>, <code>tel:</code>, and <code>/</code>. • <code>DATE</code>—Date node DATE accepts dates only in the format <code>yyyy-MM-dd</code>. • <code>DATETIME</code>—Datetime node DATETIME accepts date and time in the format: <code>yyyy-MM-dd'T'HH:mm:ss.SSS'Z'</code> (UTC datetime in ISO 8601 format). • <code>NAMEFIELD</code>—Declares the field as the name that represents the content when referenced in the UI. For example, in a list of available content in the Digital Experiences app or as available for inclusion in a collection in Experience Cloud sites. Declare only one <code>NodeType</code> in your managed content type as <code>NAMEFIELD</code>. <ul style="list-style-type: none"> – <code>NAMEFIELD</code> is a string type of 200 characters or less. – When <code>NAMEFIELD</code> is used, <code>isRequired</code> must also be set to <code>True</code> for the field. |
| PlaceholderText | <p>Type textarea</p> |

| Field | Details |
|-------|--|
| | Properties Filter, Group, Nillable, Sort |
| | Description Provides assistive text in the UI, displayed as placeholder, or ghost text, in a field before any entry is made. For example, <code>Enter a title for your article...</code> |

ManagedContentType

Represents standard and custom content types created for use with your org. Available in API version 47.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, POST, DELETE



Note: You can delete a content type only if no content has been created based on that content type.

ManagedContentType

| Field | Details |
|---------------|--|
| Description | Type textarea |
| | Properties Filter, Group, Nillable, Sort |
| | Description Describes the custom content type defined in this ManagedContentType declaration. |
| DeveloperName | Type string |
| | Properties Filter, Group, Sort |
| | Description Unique name for the custom content type. For example: <code>OurSpecialContent_c</code> |
| FullName | Type string |

| Field | Details |
|-------------|--|
| | <p>Properties Create, Group, Nillable</p> <p>Description The full name of the content type in Metadata API. A unique name for the content type that contains only underscores and alphanumeric characters. The name must be unique across the org, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the content type.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Declares the name of the content type as it appears in the UI.</p> |
| Metadata | <p>Type mns: ManagedContentType</p> <p>Description The content type definition's metadata object, containing information about which version is active and the content type definition's description. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

MarketingAppExtension

Represents an integration with a third-party app or service that generates prospect external activity. Available in API version 53.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's field names.

Supported SOAP Calls

`describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`

Supported REST HTTP Methods

GET, PATCH, POST

Special Access Rules

MarketingAppExtension is available to customers with Account Engagement Plus, Advanced, or Premium editions.

Fields

| Field | Details |
|---------------|--|
| Description | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description The description of the activity for internal reference. Appears in the UI.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name for the MarketingAppExtension object. In the UI, this field is API Name. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API. Appears in the UI as API Name.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description This field makes data for a Marketing App Extension available to use in Account Engagement automations. Label is Active in Automations. The default value is <code>false</code>. Appears in the UI.</p> |

| Field | Details |
|-----------------|---|
| Language | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The language of the MarketingAppExtension Possible values are:</p> <ul style="list-style-type: none"> • da—Danish • de—German • en_US—English • es—Spanish • es_MX—Spanish (Mexico) • fi—Finnish • fr—French • it—Italian • ja—Japanese • ko—Korean • nl_NL—Dutch • no—Norwegian • pt_BR—Portuguese (Brazil) • ru—Russian • sv—Swedish • th—Thai • zh_CN—Chinese (Simplified) • zh_TW—Chinese (Traditional) |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released |

| Field | Details |
|-----------------|---|
| | <ul style="list-style-type: none"> unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> <p>Description Label for the MarketingAppExtension. In the UI, this field is Extension Name.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |

MarketingAppExtAssignment

Represents a Marketing App Extension Business Unit assignment, which dictates which Account Engagement business unit the external activity data is available in. Available in API version 53.0 and later.



Note: Pardot is now known as Marketing Cloud Account Engagement. We wish we could snap our fingers to update the name everywhere, but you can expect to see the previous name in a few places, including API references and documentation.

Supported SOAP Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules


MarketingAppExtAssignment is available to customers with Account Engagement Plus, Advanced, or Premium editions.

Fields

| Field | Details |
|-------------------------|--|
| MarketingAppExtensionId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description This is a relationship field. The Marketing App Extension the Business Unit Assignment is associated with. Appears in the UI.</p> <p>Relationship Name MarketingAppExtension</p> <p>Relationship Type Lookup</p> <p>Refers To MarketingAppExtension</p> |
| ParentId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description This is a relationship field. The ID of the Account Engagement business unit. Appears in the UI.</p> <p>Relationship Name Parent</p> <p>Relationship Type Lookup</p> <p>Refers To PardotTenant</p> |

MarketingAppExtActivity

Represents an Activity Type, which is a prospect activity that occurs in a third-party app and can be used in Account Engagement automations. . Available in API version 53.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's field names.

Supported SOAP Calls

`create()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, HEAD, PATCH, POST, Query

Special Access Rules

MarketingAppExtActivity is available to customers with Account Engagement Plus, Advanced, or Premium editions.

Fields

| Field | Details |
|---------------|--|
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description The description of the activity for internal reference. Appears in the UI.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The unique name for the MarketingAppExtActivity object. In the UI, this field is Extension API Name. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API. Appears in the UI as API Name.</p> |
| EndpointUrl | <p>Type string</p> |

| Field | Details |
|----------|---|
| | <p>Properties Filter, Nillable</p> <p>Description A sample endpoint that can be used to help connect the activity type to a third-party app. Appears in the UI.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description This field makes data for the Activity Type available to use in Account Engagement automations. Label is Active in Automations. The default value is <code>false</code>. Appears in the UI.</p> |
| Language | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The language of the MarketingAppExtActivity. Possible values are:</p> <ul style="list-style-type: none"> • <code>da</code>—Danish • <code>de</code>—German • <code>en_US</code>—English • <code>es</code>—Spanish • <code>es_MX</code>—Spanish (Mexico) • <code>fi</code>—Finnish • <code>fr</code>—French • <code>it</code>—Italian • <code>ja</code>—Japanese • <code>ko</code>—Korean • <code>nl_NL</code>—Dutch • <code>no</code>—Norwegian • <code>pt_BR</code>—Portuguese (Brazil) • <code>ru</code>—Russian • <code>sv</code>—Swedish • <code>th</code>—Thai • <code>zh_CN</code>—Chinese (Simplified) |

| Field | Details |
|-------------------------|---|
| | <ul style="list-style-type: none"> zh_TW—Chinese (Traditional) |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> beta deleted deprecated deprecatedEditable installed installedEditable released unmanaged |
| MarketingAppExtensionId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description This is a relationship field. It identifies the Marketing App Extension that the Activity Type is associated with. Appears in the UI.</p> <p>Relationship Name MarketingAppExtension</p> <p>Relationship Type Lookup</p> <p>Refers To MarketingAppExtension</p> |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Label for the MarketingAppExtActivity. In the UI, this field is Activity Name.</p> |
| NamespacePrefix | <p>Type string</p> |

| Field | Details |
|-------|---|
| | <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |

MarketingAppExtAction

Represents an Action Type, which is an action that you can add to Engagement Studio programs in Account Engagement and execute in a third-party app. This object is available in API version 56.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

MarketingAppExtAction is available to customers with Account Engagement Plus, Advanced, or Premium editions.

Fields

| Field | Details |
|------------|----------------------------------|
| ActionName | <p>Type</p> <p>string</p> |

| Field | Details |
|----------------|--|
| | <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The name of the action for internal use. Appears in the UI.</p> |
| ActionParams | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description The parameters for the invocable action. Appears in the UI.</p> |
| ActionSchema | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description The JSON schema for the invocable action. Appears in the UI.</p> |
| ActionSelector | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Invocable action selector. Appears in the UI.</p> |
| ApiName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API. Appears in the UI.</p> |
| Description | <p>Type textarea</p> <p>Properties Create, Nillable, Update</p> <p>Description The description of the action for internal reference. Appears in the UI.</p> |

| Field | Details |
|-------------------------|---|
| IsActive | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description The default value is <code>false</code>. Appears in the UI.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MarketingAppExtensionId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description This field is a relationship field.</p> <p>Relationship Name MarketingAppExtension</p> <p>Relationship Type Lookup</p> <p>Refers To MarketingAppExtension</p> |
| Version | <p>Type double</p> <p>Properties Create, Filter, Sort, Update</p> |

| Field | Details |
|-------|--|
| | Description Reserved for future use. |

MatchingRule

Setup object specifying a MatchingRule to use with DuplicateJob instances that share a DuplicateJobDefinition. Available in Tooling API version 42.0 and later.

Supported SOAP Calls


`query()`, `retrieve()`

Supported REST HTTP Methods

GET and POST

Fields

| Field | Details |
|----------------------------|---|
| <code>BooleanFilter</code> | Type string Properties Filter, Group, Nillable, Sort Description Boolean logic between conditions for the MatchingRule. |
| <code>Description</code> | Type textarea Properties Filter, Group, Nillable, Sort Description The description of the MatchingRule. |
| <code>DeveloperName</code> | Type string Properties Filter, Group, Sort Description The developer name for the MatchingRule. |

| Field | Details |
|-----------------|---|
| |  Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field. |
| Language | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The language in the user's personal settings.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The label of the MatchingRule.</p> |
| MatchEngine | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description This field can contain one value: the match engine used by the matching rule. Valid values are <code>ExactMatchEngine</code> and <code>FuzzyMatchEngine</code>. Default value is <code>ExactMatchEngine</code>.</p> |

| Field | Details |
|-----------------|---|
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description The namespace prefix associated with this object. |
| RuleStatus | Type picklist Properties Defaulted on create, Filter, Group, Restricted picklist, Sort Description The status of the MatchingRule. Valid values are <code>Active</code> or <code>Inactive</code> . |
| SubjectSubtype | Type picklist Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort Description The object subtype. Valid values are <code>Person</code> <code>Account</code> or <code>None</code> . |
| SubjectType | Type picklist Properties Filter, Group, Restricted picklist, Sort Description The object type: <code>Account</code> , <code>Contact</code> , or <code>Lead</code> . |

MenuItem

Represents a menu item.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`query()`, `update()`

Supported REST HTTP Methods

GET, POST

Fields

| Field | Details |
|----------|--|
| Active | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether the item in the menu is active (<code>true</code>) or not (<code>false</code>).</p> |
| AppId | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The ID of the app that this menu item is associated with. Can be an enum (such as Feed or People) or an alphanumeric ID. Use <code>AppId</code> as the unique ID for the menu item, not <code>Id</code>.</p> |
| Color | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The color of the menu item that appears in the user interface. This field is described in Web color RGB format, such as <code>00FF00</code>.</p> |
| IconURL | <p>Type url</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The URL of an icon in the menu item.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The menu item label that appears in the user interface.</p> |
| MenuType | <p>Type picklist</p> |

| Field | Details |
|------------------------|--|
| | <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The type of menu that this menu item belongs to. Valid values are:</p> <ul style="list-style-type: none"> • <code>AppSwitcher</code>: the app menu, a drop-down menu that's displayed at the top of every app page • <code>Salesforce1</code>: the Salesforce mobile app navigation menu • <code>NetworkTabs</code>: the Digital Experiences tab set <p>This field is required for <code>query()</code>.</p> |
| <code>SortOrder</code> | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort, Update</p> <p>Description The <code>SortOrder</code> value determines the order in which a menu item is displayed in the user interface. This field must be an ordinal number greater than 0, and must be unique in the list. Inactive menu items have a value of -1.</p> |
| <code>Theme</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The associated theme, which must be one of the following values.</p> <ul style="list-style-type: none"> • <code>theme2</code>: the Salesforce theme that was used prior to Spring '10 • <code>theme3</code>: the Salesforce theme that was introduced in Spring '10 • <code>theme4</code>: the theme that was introduced in Winter '14 for the mobile touchscreen version of Salesforce • <code>custom</code>: the theme that's associated with a custom icon <p>This field is required for <code>query()</code> for <code>Color</code> and <code>IconURL</code>.</p> |

Usage

MenuItem can be queried and manipulated to change how menu items appear in Salesforce. The following example modifies the Salesforce mobile app navigation menu.

```
String query = "SELECT AppId, Label, Active, SortOrder FROM MenuItem "
+
    "WHERE MenuType = 'Salesforce'";
SObject[] records = sforce.query(query).getRecords();
```

```
//Activate all menu items
for (int i = 0; i < records.length; i++) {
    MenuItem item = (MenuItem)records[i];
    item.setOrder(i + 1);
    item.setActive(true);
}

sforce.update(records);
```

MetadataComponentDependency (Beta)

Represents dependency relationships between the metadata components in your org. You can query MetadataComponentDependency using Tooling API in API version 43.0 and later or using Bulk API 2.0 in API 49.0 and later.



Note: As a Beta feature, MetadataComponentDependency (Dependency API) is a preview and isn't part of the "Services" under your Main Services Agreement with Salesforce. Use this feature at your sole discretion, and make your purchase decisions based on the generally available products and features. Salesforce doesn't guarantee general availability of this feature within any particular time frame or at all, and we can discontinue it at any time. This feature is for evaluation purposes only, not for production use. It's offered as is and isn't supported. Salesforce has no liability for any harm or damage arising out of the use of this feature. All restrictions, Salesforce reservation of rights, obligations concerning the Services, and terms for related Non-Salesforce Applications and Content apply equally to your use of this feature. You can provide feedback and suggestions in the [Dependency API/Field Usage \(Beta\)](#) Trailblazer Community group page.

Supported SOAP Calls

query()

Supported REST HTTP Methods

Tooling API—GET

Bulk API 2.0—POST, GET, PATCH, DELETE

Limitations

Tooling API

- No more than 2000 records in a single query.
- Reports are not included in MetadataComponentDependency queries. Use Bulk API 2.0 for dependency relationships that include reports.

Bulk API 2.0

- No more than 100,000 records in a single query.

The following SOQL queries are not supported in both Tooling API and Bulk API 2.0

- SOQL ORDER BY clause
- SOQL SELECT clause: count() function
- SOQL queryMore()

- SOQL WHERE clause: any type of filter with `MetadataComponentName`
- SOQL WHERE clause: any type of filter with `RefMetadataComponentName`
- SOQL WHERE clause: contains operators *other* than `=`, `!=`, `AND`, or `OR`
- SOQL WHERE clause: filter by (`RefMetadataComponentType = 'StandardEntity'`)
- SOQL WHERE clause: use of the `LIKE` operator with either the `MetadataComponentType` field or the `RefMetadataComponentType` field
- SOQL OFFSET clause

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|---|--|
| <code>MetadataComponentId</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of a metadata component that depends on another component.</p> <p>The component with the ID listed in the output as <code>MetadataComponentId</code> has a reference to the component with its ID listed as <code>RefMetadataComponentId</code>.</p> <p><code>MetadataComponentId</code> is a string field that usually contains either an 18-character ID or a standard object name. Use 18-character IDs, not 15-character IDs, in your queries of this field.</p> |
| <code>MetadataComponentName</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of a metadata component that depends on another component. For example, <code>YourClass</code> for an Apex class or <code>yourField</code> (without the <code>__c</code> suffix) for a custom field.</p> <p>The component with the name listed in the output as <code>MetadataComponentName</code> has a reference to the component with its name listed as <code>RefMetadataComponentName</code>.</p> |
| <code>MetadataComponentNamespace</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of a metadata component that depends on another component.</p> |

| Field | Details |
|--|---|
| | <p>The component with the namespace listed in the output as <code>MetadataComponentNamespace</code> has a reference to the component with its namespace listed as <code>RefMetadataComponentNamespace</code>.</p> |
| <code>MetadataComponentType</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The type of a metadata component that depends on another component.</p> <p>The component with the type listed in the output as <code>MetadataComponentType</code> has a reference to the component with its type listed as <code>RefMetadataComponentType</code>.</p> |
| <code>RefMetadataComponentId</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of a metadata component that another component depends on.</p> <p>The component with the ID listed in the output as <code>RefMetadataComponentId</code> is referenced by the component with its ID listed as <code>MetadataComponentId</code>.</p> <p><code>RefMetadataComponentId</code> is a string field that usually contains either an 18-character ID or a standard object name. Use 18-character IDs, not 15-character IDs, in your queries of this field.</p> |
| <code>RefMetadataComponentName</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of a metadata component that another component depends on. For example, <code>YourClass</code> for an Apex class or <code>yourField</code> (without the <code>__c</code> suffix) for a custom field.</p> <p>The component with the name listed in the output as <code>RefMetadataComponentName</code> is referenced by the component with its name listed as <code>MetadataComponentName</code>.</p> |
| <code>RefMetadataComponentNamespace</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of a metadata component that another component depends on.</p> |

| Field | Details |
|---------------------------------------|--|
| | <p>The component with the namespace listed in the output as <code>RefMetadataComponentNamespace</code> is referenced by the component with its namespace listed as <code>MetadataComponentNamespace</code>.</p> |
| <code>RefMetadataComponentType</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The type of a metadata component that another component depends on.</p> <p>The component with the type listed in the output as <code>RefMetadataComponentType</code> is referenced by the component with its type listed as <code>MetadataComponentType</code>.</p> |

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[Tooling API Usage](#)

Use SOQL queries to list the relationships between the metadata components in your org. The query results include one row for each relationship. Each relationship is a directional dependency between two metadata components.

[Bulk API 2.0 Usage](#)

Using Bulk API 2.0, you can query the `MetadataComponentDependency` Tooling API object and retrieve up to 100,000 records in a single query. Use SOQL queries to list the relationships between the metadata components in your org.

Tooling API Usage

Use SOQL queries to list the relationships between the metadata components in your org. The query results include one row for each relationship. Each relationship is a directional dependency between two metadata components.

This Apex class (`YourClass`) references a custom field (`yourField__c`) on the Account object.

```
public class YourClass {
    public void updateAccount(Account acc, String value) {
        acc.yourField__c = value;
        update(acc);
    }
}
```

In the output of a `MetadataComponentDependency` query, the Apex class is represented as a metadata component (the component doing the referencing, represented by `MetadataComponent*` field values). The custom field is represented as a referenced metadata component (represented by `RefMetadataComponent*` field values). Each row in the output shows a directional dependency from one metadata component (such as `YourClass`) to one of the metadata components that it references (such as `yourField`).

Each of the two components is represented using four fields.

Id

The ID of this component.

Name

The name of this component (for example, `YourClass`).

Namespace

The namespace this component belongs to (or, if the component isn't in a package, `null`).

Type

The type of the component (for example, `ApexClass`).

In the example of the Apex class referencing a custom field, a row in the output would include something like these values.

- `MetadataComponentId: "01p000000000SOMEID"`
- `MetadataComponentName: "YourClass"`
- `MetadataComponentNamespace: null`
- `MetadataComponentType: "ApexClass"`
- `RefMetadataComponentId: "00N000000000SOMEID"`
- `RefMetadataComponentName: "yourField"`
- `RefMetadataComponentNamespace: null`
- `RefMetadataComponentType: "CustomField"`

All the `MetadataComponent*` field values represent the Apex class, and the `RefMetadataComponent*` field values represent the custom field that the Apex class references.

Each row is a directional dependency, where the metadata component references the referenced metadata component. If two components reference each other, the circular relationship is described as two separate rows. For example, two Apex classes can reference each other.

```
public class ClassA {
    public ClassB newB() {
        return new ClassB();
    }
}
```

```
public class ClassB {
    public ClassA newA() {
        return new ClassA();
    }
}
```

The output for a `MetadataComponentDependency` query that includes these two classes, each directional relationship (`ClassA -> ClassB`, and `ClassB -> ClassA`) are represented as a separate row.

Row 1 (`ClassA -> ClassB`):

- `MetadataComponentId: "01p000000000SOMEIDA"`
- `MetadataComponentName: "ClassA"`
- `MetadataComponentNamespace: null`
- `MetadataComponentType: "ApexClass"`
- `RefMetadataComponentId: "00N000000000SOMEIDB"`
- `RefMetadataComponentName: "ClassB"`
- `RefMetadataComponentNamespace: null`
- `RefMetadataComponentType: "ApexClass"`

Row 2 (`ClassB -> ClassA`):

- `MetadataComponentId: "01p000000000SOMEIDB"`
- `MetadataComponentName: "ClassB"`

- MetadataComponentNamespace: null
- MetadataComponentType: "ApexClass"
- RefMetadataComponentId: "00N00000000SOMEIDA"
- RefMetadataComponentName: "ClassA"
- RefMetadataComponentNamespace: null
- RefMetadataComponentType: "ApexClass"

In all but the simplest orgs, MetadataComponentDependency queries return a huge number of rows. It can be useful to limit the scope of your requests by type, name, or ID, to help isolate dependencies on specific components.

This SOQL query shows all references to the Apex class `YourClass`. For example, it shows pages, components, flows, and other classes that `YourClass` depends on.

```
SELECT MetadataComponentName, MetadataComponentType
FROM MetadataComponentDependency
WHERE RefMetadataComponentType = 'ApexClass'
```

This example shows all references to a field, including references from layouts, Apex code, flows, and so on. In this example, the code determines the field ID by querying the `FieldDefinition` object. The query's output shows all the metadata components that depend on the field with the ID `yourFieldId`.

```
SELECT MetadataComponentName, MetadataComponentType
FROM MetadataComponentDependency
WHERE RefMetadataComponentId = yourFieldId
```

Bulk API 2.0 Usage

Using Bulk API 2.0, you can query the `MetadataComponentDependency` Tooling API object and retrieve up to 100,000 records in a single query. Use SOQL queries to list the relationships between the metadata components in your org.

Bulk API 2.0 requests are returned in CSV format.

You can use the `WHERE` clause to filter your query.

```
{
  "operation": "query",
  "query": "select RefMetadataComponentName, RefMetadataComponentType, RefMetadataComponentId
          FROM MetadataComponentDependency
          WHERE RefMetadataComponentId = '01p0U000001ONbgQAG'"
}
```

Create a Bulk API 2.0 Query Job

| Description | URI | HTTP Method |
|----------------------|---|-------------|
| Creates a query job. | <code>/services/data/vXX.X/tooling/jobs/query</code> | POST |

This example creates a job that queries the Tooling API object `MetadataComponentDependency`.

```
curl --include --request POST \
--header "Authorization: OAuth token " \
--header "Accept: application/json " \
```

```
--header "Content-Type: application/json" \
--data '{
  "operation": "query",
  "query": "select MetadataComponentType FROM MetadataComponentDependency"
}' \
"https://instance.salesforce.com/services/data/v49.0/tooling/jobs/query"
```

The response is:

```
HTTP/1.1 200 OK
{
  "id" : "750R0000000$H8AAU",
  "operation" : "query",
  "object" : "MetadataComponentDependency",
  "createdById" : "005xx000001X9JAAS",
  "createdDate" : "2020-04-09T17:51:02.000+0000",
  "systemModstamp" : "2020-04-09T17:51:02.000+0000",
  "state" : "UploadComplete",
  "concurrencyMode" : "Parallel",
  "contentType" : "CSV",
  "apiVersion" : 49.0,
  "lineEnding" : "LF",
  "columnDelimiter" : "COMMA"
}
```

Get Information About a Query Job

| Description | URI | HTTP Method |
|---|--|-------------|
| Gets information about all query jobs in the org. | /services/data/v XX.X /tooling/jobs/query | GET |
| Gets information about one query job. | /services/data/v XX.X /tooling/jobs/query/ queryJobId | GET |
| Gets the results for a query job. | /services/data/v XX.X /tooling/jobs/query/ queryJobId /results | GET |

This example gets information about the job with ID 750R0000000\$H8AAU.

```
curl --include --request GET \
--header "Authorization: OAuth token" \
"https://instance.salesforce.com/services/data/v49.0/tooling/jobs/query/750R0000000$H8AAU"
```

The response is:

```
{
  "id" : "750R0000000$H8AAU",
  "operation" : "query",
  "object" : "MetadataComponentDependency",
  "createdById" : "005xx000001X9JAAS",
  "createdDate" : "2020-04-09T17:51:02.000+0000",
  "systemModstamp" : "2020-04-09T17:51:02.000+0000",
  "state" : "JobComplete",
  "concurrencyMode" : "Parallel",
}
```



```

"contentType" : "CSV",
"apiVersion" : 49.0,
"jobType" : "V2Query",
"lineEnding" : "LF",
"columnDelimiter" : "COMMA",
"numberRecordsProcessed" : 145,
"retries" : 0,
"totalProcessingTime" : 272}

```

Abort or Delete a Query Job

| Description | URI | HTTP Method |
|----------------------|---|-------------|
| Aborts a query job. | /services/data/v XX.X /tooling/jobs/query/ queryJobId | PATCH |
| Deletes a query job. | /services/data/v XX.X /tooling/jobs/query/ queryJobId | DELETE |

This example aborts the job with ID 750R0000000\$H8AAU:

```

curl --request PATCH \
--header "Authorization: OAuth token" \
--header "Content-Type: application/json" \
--data '{
  "state": "Aborted"
}' \
"https://instance.salesforce.com/services/data/v49.0/tooling/jobs/query/750R0000000$H8AAU"

```

The response is:

```

{
  "id": "750R0000000$H8AAU",
  "operation": "query",
  "object": "MetadataComponentDependency",
  "createdById" : "005xx000001X9JAAS",
  "createdDate" : "2020-04-09T17:51:02.000+0000",
  "systemModstamp" : "2020-04-09T17:51:02.000+0000",
  "state": "Aborted",
  "concurrencyMode": "Parallel",
  "contentType": "CSV",
  "apiVersion": 49.0
}

```

Additional Information

For more information, see [Bulk API 2.0](#).

MetadataContainer

Manages working copies of ApexClassMember, ApexTriggerMember, ApexPageMember, and ApexComponentMember objects, including collections of objects to be deployed together.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Special Access Rules

As of the Spring '20 release, to access MetadataContainer you must have the View All Data user permission and either the Author Apex user permission or the Customize Application user permission.

Fields


| Field Name | Details |
|------------|---|
| Name | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Update</p> <p>Description</p> <p>The name of the MetadataContainer. If a container with the same name already exists, an error is reported on <code>create()</code> or <code>POST</code>.</p> <p>This field is required.</p> |

Usage

Use a MetadataContainer as a package for your tool's workspace. As a user works in the tool, update the [ApexClassMember](#), [ApexTriggerMember](#), [ApexPageMember](#), and [ApexComponentMember](#) objects in the MetadataContainer and use a [ContainerAsyncRequest](#) object to save and deploy changes to the current organization.

A MetadataContainer can be reused, but container members can't.

- When a ContainerAsyncRequest completes successfully, the `MetadataContainerId` field on all container members is changed from the ID of the MetadataContainer to the ID of the ContainerAsyncRequest. At this point, container members can no longer be modified or deployed, and can't be queried via the MetadataContainer; you have to query the ContainerAsyncRequest to see what was deployed.
- If the deployment fails, container members remain on the MetadataContainer and can still be modified until they are successfully deployed on another ContainerAsyncRequest. The `MetadataContainerId` field on the completed (failed deployment) ContainerAsyncRequest is set to the ID of the MetadataContainer, so you can have multiple completed ContainerAsyncRequests on a single MetadataContainer.

 **Note:** Deleting a MetadataContainer deletes all objects that reference it.

SEE ALSO:

[Metadata API Developer Guide](#)

MetadataPackage

Represents a package that has been developed in the org you're logged in to. Applies to unlocked, unmanaged, first-generation, and second-generation managed packages. Available in Tooling API version 38.0 and later.

Supported SOAP Calls

`query()`, `retrieve()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|-----------------|--|
| Name | Type string Properties Filter, Group, idLookup, Sort Description The name of the package. |
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description For first-generation and second-generation managed packages, and unlocked packages with namespaces, this field is the namespace prefix assigned to the package. For unmanaged packages, or no-namespace unlocked packages, this field is blank. |
| PackageCategory | Type picklist Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort |

| Field | Details |
|-------|--|
| | <p>Description</p> <p>The type of package. Valid values are:</p> <ul style="list-style-type: none"> • <code>Application</code> (internal use only) • <code>Module</code> (internal use only) • <code>Package</code>—Represents either an unmanaged package or a first-generation managed package. • <code>Package2</code>—Represents either an unlocked package or a second-generation managed package. <p>The default value is <code>Package</code>.</p> <p>This field is available in API version 49.0 and later.</p> |

MetadataPackageVersion

Represents a package version (managed or unmanaged) that has been uploaded from the org you're logged in to. Available in Tooling API version 38.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|---------------------------|--|
| <code>BuildNumber</code> | <p>Type</p> <p>int</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The build number of the version. For example, if you upload two beta versions, they have build numbers 1 and 2. Then, when you upload a released build of the same version, the build number is 3. When you upload a new version, the build number resets to 1.</p> |
| <code>IsDeprecated</code> | <p>Type</p> <p>boolean</p> |

| Field | Details |
|-------------------|---|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the package version is deprecated. Available in API version 46.0 and later.</p> |
| MajorVersion | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The first number in a package version number. A version number either has an $x.y$ format or an $x.y.z$ format. The x represents the major version, y the minor version, and z the patch version.</p> |
| MetadataPackageId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The 18-character package ID, which starts with 033.</p> |
| MetadataZip | <p>Type binary data</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The zip file containing the packaged metadata for the package version.</p> |
| MinorVersion | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The second number in a package version number. A version number either has an $x.y$ format or an $x.y.z$ format. The x represents the major version, y the minor version, and z the patch version.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> |

| Field | Details |
|--------------|--|
| | Description The name of the package version. |
| PatchVersion | Type int Properties Filter, Group, Nillable, Sort Description The third number in a package version number, if present. A version number either has an <code>x.y</code> format or an <code>x.y.z</code> format. The <code>x</code> represents the major version, <code>y</code> the minor version, and <code>z</code> the patch version. |
| ReleaseState | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort Description If the package version is a beta version, the value is <code>Beta</code> . Otherwise, the value is <code>Released</code> . |

Usage

Here are examples of the types of API queries you can perform.

| Query | String |
|--|---|
| Get all package versions for the package that has a MetadataPackageID of 033D00000001xQlIAI | <pre>SELECT Id, Name, ReleaseState, MajorVersion, MinorVersion, PatchVersion FROM MetadataPackageVersion WHERE MetadataPackageId = '033D00000001xQlIAI'</pre> |
| Get the package version for the package with a specific MetadataPackageID and a major version greater than 1 | <pre>SELECT Id FROM MetadataPackageVersion WHERE MetadataPackageId ='033D00000001xQlIAI' AND MajorVersion > 1</pre> |
| Get released package versions for the package with a specific MetadataPackageID | <pre>SELECT Id FROM MetadataPackageVersion WHERE MetadataPackageId = '033D00000001xQlIAI' AND ReleaseState = 'Released'</pre> |

Java Code Sample

Suppose you want to push version 3.4.6 of your package to all orgs. Let's write some code to identify the orgs eligible for the upgrade. This example demonstrates how to generate the list of subscriber orgs eligible to be upgraded to version 3.4.6 of a package.

This code sample uses the web Services Connector (WSC).

```
// Finds all Active subscriber orgs that have the package installed
String PACKAGE_SUBSCRIBER_ORG_KEY_QUERY = "Select OrgKey from PackageSubscribers where
OrgStatus = 'Active' and InstalledStatus = 'I'";

// Finds all MetadataPackageVersions lower than the version given, including the list
// of subscribers for each version
String METADATA_PACKAGE_VERSION_QUERY = "Select Id, Name, ReleaseState, (%s) from"
+ " MetadataPackageVersion where MetadataPackageId = '%s' AND ReleaseState = 'Released'"

+ " AND (MajorVersion < 3 OR (MajorVersion = 3 and MinorVersion < 4))"
+ " OR (MajorVersion = 3 and MinorVersion = 4 and PatchVersion < 6))";

// conn is an EnterpriseConnection instance initialized with a ConnectionConfig object
// representing a connection to the developer org of the package
QueryResult results = conn.query(String.format(METADATA_PACKAGE_VERSION_QUERY,
PACKAGE_SUBSCRIBER_ORG_KEY_QUERY));

// This list will hold all of the PackageSubscriber objects that are eligible for upgrade
// to the given version
List<PackageSubscriber> subscribers = new ArrayList<>();
for (SObject mpvso : results.getRecords()) {

    // Cast the sObject to a MetadataPackageVersion
    MetadataPackageVersion mpv = (MetadataPackageVersion) mpvso;

    // Add subscribers to our list
    if (mpv.getPackageSubscribers() != null) {
        for (SObject psso : mpv.getPackageSubscribers().getRecords()) {
            subscribers.add((PackageSubscriber) psso);
        }
    }
}
```

Next Step

Create a push request using PackagePushRequest.

MLDataDefinition

Represents a modeling data definition, which specifies the data used to create a model for a machine learning (ML) application. Examples of such data can include filters, fields to include, and fields to exclude. Available from API version 50.0 or later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.



Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query


Fields

| Field | Details |
|---------------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow as a <code>DeveloperName</code> is generated for each record.</p> |
| EntityDeveloperName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The developer name of the object from which the model data is retrieved.</p> <p> Note: After the <code>MLDataDefinition</code> entity is created, <code>EntityDeveloperName</code> can't be updated.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated <code>MLDataDefinition</code> type in Metadata API. The full name can include a namespace prefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|-----------------|---|
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the MLDataDefinition.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Label that identifies the MLDataDefinition throughout the Salesforce user interface.</p> |
| Metadata | <p>Type MLDataDefinition</p> <p>Properties Create, Nillable, Update</p> <p>Description The metadata of MLDataDefinition. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|--------------------|---|
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| ParentDefinitionId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the <code>MLRecommendationDefinition</code> or <code>MLPredictionDefinition</code> that this <code>MLDataDefinition</code> belongs to.</p> <p>This is a polymorphic relationship field.</p> <p>Relationship Name ParentDefinition</p> <p>Relationship Type Lookup</p> <p>Refers To <code>MLPredictionDefinition</code>, <code>MLRecommendationDefinition</code></p> |
| ScoringFilterId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Specifies the record ID to which the prediction scores are written.</p> <p>This is a relationship field.</p> |

| Field | Details |
|------------------|--|
| | <p>Relationship Name ScoringFilter</p> <p>Relationship Type Lookup</p> <p>Refers To MLFilter</p> |
| SegmentFilterId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Specifies the record IDs of the data used for training and scoring. This is a relationship field.</p> <p>Relationship Name SegmentFilter</p> <p>Relationship Type Lookup</p> <p>Refers To MLFilter</p> |
| TrainingFilterId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Specifies the record IDs that make up the training set. This is a relationship field.</p> <p>Relationship Name TrainingFilter</p> <p>Relationship Type Lookup</p> <p>Refers To MLFilter</p> |
| Type | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Nillable, Sort</p> <p>Description Specifies the data type. Valid values are:</p> |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> • Candidate • Interaction • Prediction • Recipient  Note: After the model is created, <code>type</code> can't be updated.. |

MLField

Represents a field in a modeling data definition. A modeling data definition specifies the data used to create a model for a machine learning (ML) application. Available from API version 50.0 or later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|--------|--|
| Entity | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Nillable, Sort, Update</p> <p>Description The object that contains the MLField. Valid values include all Salesforce objects except the Internal, Interface, Virtual, and InDevelopment custom objects.</p> |
| Field | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Nillable, Sort, Update</p> <p>Description The name of the MLField. Valid values include all Salesforce objects except the Internal, Interface, Virtual, and InDevelopment custom objects.</p> |

| Field | Details |
|--------------------|--|
| ParentDefinitionId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the MLrecommendationDefinition or MLPredictionDefinition that this MLField belongs to. This is a polymorphic relationship field.</p> <p>Relationship Name ParentDefinition</p> <p>Relationship Type Lookup</p> <p>Refers To MLDataDefinition, MLRecommendationDefinition</p> |
| RelatedFieldId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Reserved for future use. This is a relationship field.</p> <p>Relationship Name RelatedField</p> <p>Relationship Type Lookup</p> <p>Refers To MLField</p> |
| RelationType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Reserved for future use.</p> |
| Type | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Nillable, Sort, Update</p> |

| Field | Details |
|-------|--|
| | Description Indicates how the field is used in a prediction. Valid values are: <ul style="list-style-type: none"> • Excluded • Expression • Included • Join • NegativeExpression • PositiveExpression • Prediction • Pushback • Related • ScoringExpression • SegmentExpression • SourceDate • TrainingExpression |

MLFilter

Represents a data filter based on a data comparison in a machine learning (ML) application. For each comparison, there's a left-hand element, an operator, and a right-hand element. Available in API version 50.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|------------|--|
| FilterName | Type string Properties Create, Filter, Group, Nillable, Sort, Update Description Name of the filter. |

| Field | Details |
|-------------------|---|
| LhFilterId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description ID of the left-hand filter condition. This is a relationship field.</p> <p>Relationship Name LhFilter</p> <p>Relationship Type Lookup</p> <p>Refers To MLFilter</p> |
| LhPredictionField | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Left-hand prediction field.</p> |
| LhType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Indicates the value type if a left-hand value is specified. Valid values are:</p> <ul style="list-style-type: none"> • Boolean • Comparison • Currency • Date • DateTime—Datetime • Number • String • Supplier • Varchar |
| LhUnit | <p>Type picklist</p> |

| Field | Details |
|-----------|---|
| | <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Indicates the unit if a left-hand filter is specified. Valid values are:</p> <ul style="list-style-type: none"> • Days • Hours • Milliseconds • Minutes • Months • Seconds • Weeks • Years |
| LhValue | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The left-hand value.</p> |
| Operation | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Specifies how to filter the data. Valid values are:</p> <ul style="list-style-type: none"> • Add • And • Between • Concat • Contains • Divide • DoesNotContain • EndsWith • Equals • GreaterThan • GreaterThanOrEqual • In • IsNotNull |


| Field | Details |
|--------------------|--|
| | <ul style="list-style-type: none"> IsNull LessThan LessThanOrEqual Multiply Not NotEquals Or StartsWith Subtract |
| ParentDefinitionId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the MLRecommendationDefinition, MLPredictionDefinition, or MLDataDefinition that this MLFilter belongs to. This is a polymorphic relationship field.</p> <p>Relationship Name ParentDefinition</p> <p>Relationship Type Lookup</p> <p>Refers To MLDataDefinition, MLPredictionDefinition, MLRecommendationDefinition</p> |
| RhFilterId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description ID of the right-hand filter condition. This is a relationship field.</p> <p>Relationship Name RhFilter</p> <p>Relationship Type Lookup</p> <p>Refers To MLFilter</p> |

| Field | Details |
|-------------------|--|
| RhPredictionField | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Right-hand prediction field.</p> |
| RhType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Indicates the value type if a right-hand value is specified. Valid values are:</p> <ul style="list-style-type: none"> • Boolean • Comparison • Currency • Date • DateTime—Datetime • Number • String • Supplier • Varchar |
| RhUnit | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Indicates the unit if a right-hand filter is specified. Valid values are:</p> <ul style="list-style-type: none"> • Days • Hours • Milliseconds • Minutes • Months • Seconds • Weeks • Years |
| RhValue | <p>Type string</p> |

| Field | Details |
|-----------|---|
| | Properties Create, Filter, Group, Nillable, Sort, Update Description The right-hand value. |
| SortOrder | Type int Properties Create, Filter, Group, Nillable, Sort, Update Description Specifies the order of operations for evaluating the expressions. For example, if you have two conditions, this field specifies which condition is evaluated first. |

MLPredictionDefinition

Represents the details about a prediction within a prediction definition used in a machine learning (ML) application. Available in API version 50.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls


`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|---------------|---|
| ApplicationId | Type reference Properties Filter, Group, Nillable, Sort Description The ID of the application associated with the prediction definition. This is a relationship field. |

| Field | Details |
|---------------|---|
| | <p>Relationship Name Application</p> <p>Relationship Type Lookup</p> <p>Refers To AIApplication</p> |
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Description of the prediction.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique DeveloperName for each record. If no DeveloperName is specified, performance may slow as a DeveloperName is generated for each record.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated MLPredictionDefinition type in Metadata API. The full name can include a namespace prefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|-----------------|---|
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the MLPredictionDefinition.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Label that identifies the MLPredictionDefinition definition throughout the Salesforce user interface.</p> |
| Metadata | <p>Type AIApplication</p> <p>Properties Create, Nillable, Update</p> <p>Description The MLPredictionDefinition's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|----------------------|--|
| MLDataDefinitions | <p>Type QueryResult</p> <p>Properties Nillable</p> <p>Description A list of prediction definition records associated with an ML application record.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| NegativeExpressionId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Reserved for future use. This is a relationship field.</p> <p>Relationship Name NegativeExpression</p> <p>Relationship Type Lookup</p> <p>Refers To MLFilter</p> |
| PositiveExpressionId | <p>Type reference</p> |

| Field | Details |
|--------------------|--|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Reserved for future use. This is a relationship field.</p> <p>Relationship Name PositiveExpression</p> <p>Relationship Type Lookup</p> <p>Refers To MLFilter</p> |
| PredictionField | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Field that the prediction is based on.</p> |
| PredictionStrategy | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Strategy that the prediction is based on.</p> |
| Priority | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Reflects the priority of the MLPredictionDefinition (MLPD) object when an AIApplication has multiple child MLPDs.</p> |
| PushbackField | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Field that the prediction writes scores to.</p> |

| Field | Details |
|--------|---|
| Status | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Nillable, Sort</p> <p>Description The status of the prediction. Valid values are:</p> <ul style="list-style-type: none"> • Disabled • Draft • Enabled |
| Type | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Nillable, Sort</p> <p>Description The type of model that returns the prediction values. Valid values are:</p> <ul style="list-style-type: none"> • BinaryClassification—1 • DeepLearningIntentClassification—5 • DeepLearningNameEntityRecognition—6 • GlobalDeepLearningIntentClassification—7 • GlobalDeepLearningNameEntityRecognition—8 • LanguageDetection—4 • MulticlassClassification—2 • Regression—3 • ScoringSpecificOutcome—0 |

ModerationRule

Represents a rule used in your Experience Cloud site to moderate member-generated content. Available in Tooling API version 36.0 and later.

Each rule specifies the member-generated content the rule applies to, the criteria to enforce the rule on, and the moderation action to take. Moderation rules help protect your site from spammers, bots, and offensive or inappropriate content.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|-------------|--|
| Action | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist</p> <p>Description Required. Indicates the moderation action that you want to take. The valid values are:</p> <ul style="list-style-type: none">• Block• Review• Replace• Flag• FreezeAndNotify (Reserved for future use.) |
| ActionLimit | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Indicates the moderation action limit measured in minutes. Available in API version 39.0 and later.</p> |
| Active | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Required. Indicates whether the moderation rule is active (<code>true</code>) or inactive (<code>false</code>).</p> |
| Description | <p>Type textarea</p> <p>Properties Filter, Nillable, Sort</p> <p>Description A description of the moderation rule.</p> |

| Field | Details |
|---------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Namefield, Sort</p> <p>Description The developer's internal name for the moderation rule used in the API.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the moderation rule. Valid values are:</p> <ul style="list-style-type: none"> Chinese (Simplified): zh_CN Chinese (Traditional): zh_TW Danish: da Dutch: nl_NL English: en_US Finnish: fi French: fr German: de Italian: it Japanese: ja Korean: ko Norwegian: no Portuguese (Brazil): pt_BR Russian: ru Spanish: es Spanish (Mexico): es_MX Spanish (Mexico) defaults to Spanish for customer-defined translations. |

| Field | Details |
|-------------|---|
| | <ul style="list-style-type: none"> Swedish: <code>sv</code> Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Label for the moderation rule.</p> |
| Metadata | <p>Type mns:ModerationRule</p> <p>Properties Create, Nillable, Update</p> <p>Description Moderation rule metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NotifyLimit | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Indicates the notification limit (in seconds) of the moderation rule. Available in API version 39.0 and later.</p> |
| TimePeriod | <p>Type RateLimitTimePeriod (enumeration of type string)</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The values that represent the time-frame for which a rate limiting rule is applied. The two values available represent a time periods measured in minutes: "Short" represents 3 minutes and "Medium" represents 15 minutes. Available in API version 39.0 and later. Valid values are:</p> <ul style="list-style-type: none"> Short Medium |
| Type | <p>Type ModerationRuleType (enumeration of type string)</p> |

| Field | Details |
|-------------|--|
| | <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Type of moderation rule. Content rules protect your site from offensive language and inappropriate content created by spammers or malicious members. Rate rules protect your site against spammers and bots that attack your site by posting the same message multiple times in a row. Available in API version 39.0 and later. Valid values are:</p> <ul style="list-style-type: none"> • Content • Rate |
| UserMessage | <p>Type textarea</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The message you want your members to see when their content is blocked. Use the <code>%BLOCKED_KEYWORD%</code> variable to display up to five blocked words in the user message. If you don't specify a message, the member sees the standard message: "You can't use <code>%BLOCKED_KEYWORD%</code> or other inappropriate words in this site. Review your content and try again."</p> |

NamedCredential

Represents a named credential, which specifies the URL of a callout endpoint and its required authentication parameters in one definition. A named credential can be specified as an endpoint to simplify the setup of authenticated callouts. This object is available in API version 51.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.



Note: All credentials stored within this entity are encrypted under a framework that is consistent with other encryption frameworks on the platform. Salesforce encrypts your credentials by auto-creating org-specific keys. Credentials encrypted using the previous encryption scheme have been migrated to the new framework.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`



Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields


| Field | Details |
|--------------------------|---|
| AllowMergeFieldsinBody | <p>Field Type boolean</p> <p>Description Specifies whether Apex code can use merge fields to populate the HTTP request body with org data when a callout is made. Corresponds to Allow Merge Fields in HTTP Body in the user interface. Defaults to <code>false</code>.</p> |
| AllowMergeFieldsinHeader | <p>Field Type boolean</p> <p>Description Specifies whether Apex code can use merge fields to populate the HTTP header with org data when a callout is made. Corresponds to Allow Merge Fields in HTTP Header in the user interface. Defaults to <code>false</code>.</p> |
| AuthProviderId | <p>Type string</p> <p>Properties Nillable</p> <p>Description The authentication provider that the AuthProviderId component represents. This field is valid only when NamedCredentialType is set to <code>Legacy</code>. This field is deprecated in API version 56.0.</p> |
| AuthTokenEndpointUrl | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description The URL where JSON Web Tokens (JWTs) are exchanged for access tokens. This field is valid only when NamedCredentialType is set to <code>Legacy</code>. This field is deprecated in API version 56.0.</p> |
| AwsAccessKey | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description First part of the access key used to sign programmatic requests to Amazon Web Services (AWS). Use when AWS Signature Version 4 is your authentication protocol.</p> |

| Field | Details |
|-----------------|---|
| | <p>This field is valid only when NamedCredentialType is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> |
| AwsAccessSecret | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description The second part of the access key used to sign programmatic requests to AWS. Use when AWS Signature Version 4 is your authentication protocol. This field is valid only when NamedCredentialType is set to <code>Legacy</code>. This field is deprecated in API version 56.0.</p> |
| AwsRegion | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Specifies which AWS Region the named credential accesses. This field is valid only when NamedCredentialType is set to <code>Legacy</code>. This field is deprecated in API version 56.0.</p> |
| AwsService | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Specifies which AWS resource the named credential accesses. This field is valid only when NamedCredentialType is set to <code>Legacy</code>. This field is deprecated in API version 56.0.</p> |
| CertificateId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description If you specify a certificate, your Salesforce org supplies it when establishing each two-way SSL connection with the external system. The certificate is used for digital signatures, which verify that requests are coming from your Salesforce org. This field is valid only when NamedCredentialType is set to <code>Legacy</code>.</p> |

| Field | Details |
|---------------|---|
| | <p>This field is deprecated in API version 56.0.</p> <p>Relationship Name Certificate</p> <p>Relationship Type Lookup</p> <p>Refers To Certificate</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The developer's internal name for the named credential used in the API.</p> <p>This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| Endpoint | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description The URL or root URL of the callout endpoint. Corresponds to URL in the user interface.</p> <p>This field is valid only when <code>NamedCredentialType</code> is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated type in Tooling API. The full name can include a namespace prefix. Query this field only if the query result contains no more than one record. Otherwise,</p> |

| Field | Details |
|-----------------------------|---|
| | <p>an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| GenerateAuthorizationHeader | <p>Field Type boolean</p> <p>Description Specifies whether Salesforce generates an authorization header and applies it to each callout that references the named credential. Corresponds to Generate Authorization Header in the user interface. Defaults to <code>true</code>.</p> <p>This field is available in API version 41.0 and later.</p> |
| JwtAudience | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description External service or other allowed recipients for the JWT. Written as JSON, with a quoted string for a single audience and an array of quoted strings for multiple audiences. Single audience example: "aud1". Multiple audiences example: ["aud1", "aud2", "aud3"].</p> <p>This field is valid only when NamedCredentialType is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> |
| JwtFormulaSubject | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Formula string calculating the Subject of the JWT. API names and constant strings, in single quotes, can be included. Allows a dynamic Subject unique per user requesting the token. For example, <code>'User='+\$User.Id</code>. Use this field when <code>principalType</code> is set to <code>PerUser</code>. Corresponds to <code>Per User Subject</code>.</p> <p>This field is valid only when NamedCredentialType is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> |
| JwtIssuer | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Specify who issued the JWT using a case-sensitive string.</p> <p>This field is valid only when NamedCredentialType is set to <code>Legacy</code>.</p> |

| Field | Details |
|--------------------------|--|
| | This field is deprecated in API version 56.0. |
| JwtSigningCertificateId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Certificate verifying the JWT's authenticity to external sites. This field is valid only when NamedCredentialType is set to Legacy.</p> <p>This field is deprecated in API version 56.0.</p> <p>Relationship Name JwtSigningCertificate</p> <p>Relationship Type Lookup</p> <p>Refers To Certificate</p> |
| JwtTextSubject | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Static text, without quotes, that specifies the JWT Subject. Use this field when principalType is set to NamedUser. Corresponds to Named Principal Subject in the user interface. This field is valid only when NamedCredentialType is set to Legacy.</p> <p>This field is deprecated in API version 56.0.</p> |
| JwtValidityPeriodSeconds | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Specify the number of seconds that the token is valid. This field is valid only when NamedCredentialType is set to Legacy.</p> <p>This field is deprecated in API version 56.0.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> |

| Field | Details |
|------------------------------|--|
| | <p>Description</p> <p>Label for the <code>MasterLabel</code>. In the UI, this field is Label.</p> |
| <code>ManageableState</code> | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • <code>beta</code>—Managed-Beta • <code>deleted</code>—Managed-Proposed-Deleted • <code>deprecated</code>—Managed-Proposed-Deprecated • <code>deprecatedEditable</code>—SecondGen-Installed-Deprecated • <code>installed</code>—Managed-Installed • <code>installedEditable</code>—SecondGen-Installed-Editable • <code>released</code>—Managed-Released • <code>unmanaged</code>—Unmanaged |
| <code>MasterLabel</code> | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p> Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.</p> <p>The main label for the named credential. This display value is the internal label that doesn't get translated.</p> |
| <code>Metadata</code> | <p>Type</p> <p>NamedCredential</p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>Provides access to the associated metadata type and related fields in Tooling API.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|---------------------------|--|
| NamedCredentialParameters | <p>Type NamedCredentialParameter[]</p> <p>Properties Nillable</p> <p>Description Reference to the (one or more) NamedCredentialParameter used to configure a named credential. This field is available in API version 56.0 and later.</p> |
| NamedCredentialType | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Specifies the type or behavior of this named credential. Possible values are:</p> <ul style="list-style-type: none"> • Legacy: The named credential is a legacy type, which means that it doesn't use the schema introduced in the Winter '23 release. Used for backward compatibility. • PrivateEndpoint: The named credential sends traffic through a private connection, bypassing the public internet. If the credential type is PrivateEndpoint, you must specify the value of OutboundNetworkConnection. • SecuredEndpoint: The named credential is extensible and uses external credentials to control authentication and permissions. <p>This field is available in API version 56.0 and later.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the namespacePrefix__componentName notation.</p> |
| OAuthRefreshToken | <p>Type textarea</p> <p>Properties Nillable</p> |

| Field | Details |
|-----------------------------|--|
| | <p>Description</p> <p>The OAuth refresh token. Used to obtain a new access token for an end user when a token expires.</p> <p>This field is valid only when NamedCredentialType is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> |
| OAuthScope | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Nillable, Sort</p> <p>Description</p> <p>Specifies the scope of permissions to request for the access token. Corresponds to Scope in the user interface.</p> <p>This field is valid only when NamedCredentialType is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> |
| OAuthToken | <p>Type</p> <p>textarea</p> <p>Properties</p> <p>Nillable</p> <p>Description</p> <p>The access token that's issued by your authorization server.</p> <p>This field is valid only when NamedCredentialType is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> |
| OutboundNetworkConnectionId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Specifies the outbound network connection that uses the named credential to send callouts to AWS.</p> <p>This field is valid only when NamedCredentialType is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> <p>Relationship Name</p> <p>OutboundNetworkConnection</p> <p>Relationship Type</p> <p>Lookup</p> <p>Refers To</p> <p>OutboundNetworkConnection</p> |

| Field | Details |
|---------------|---|
| Password | <p>Type</p> <p>textarea</p> <p>Properties</p> <p>Nullable</p> <p>Description</p> <p>The password to be used by your org to access the external system. Ensure that the credentials have adequate privileges to access the external system. Depending on how you set up access, you might need to provide the administrator password.</p> <p>This field is valid only when NamedCredentialType is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> |
| PrincipalType | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>Determines whether you're using one set or multiple sets of credentials to access the external system. Corresponds to Identity Type in the user interface. The valid values are:</p> <p>Possible values are:</p> <ul style="list-style-type: none">• <code>Anonymous</code>• <code>NamedUser</code>• <code>PerUser</code> <p>This field is valid only when NamedCredentialType is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> |
| Protocol | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>The authentication protocol that's required to access the external system. The valid values are:</p> <ul style="list-style-type: none">• <code>AwsSv4</code>• <code>Jwt</code>• <code>JwtExchange</code>• <code>NoAuthentication</code>• <code>Oauth</code>• <code>Password</code> <p>For connections to Amazon Web Services using Signature Version 4, use <code>AwsSv4</code>.</p> |

| Field | Details |
|----------|--|
| | <p>For connections using a direct token system, select <code>Jwt</code>. If using an intermediary authorization provider to process JWTs and return access tokens, use <code>JwtExchange</code>.</p> <p>For Simple URL data sources, select <code>NoAuthentication</code>.</p> <p>For cloud-based Files Connect external systems, select <code>Oauth</code>. For on-premises systems, select <code>Password</code>.</p> <p>This field is valid only when <code>NamedCredentialType</code> is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> |
| Username | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The username to be used by your org to access the external system. Ensure that the credentials have adequate privileges for performing callouts to the external system. Depending on how you set up access, you might need to provide the administrator username.</p> <p>This field is valid only when <code>NamedCredentialType</code> is set to <code>Legacy</code>.</p> <p>This field is deprecated in API version 56.0.</p> |

NamedCredentialParameter

Represents the parameters that configure a named credential. Named credential parameters are used to configure Named Credential callouts through a combination of the type, name, and value/lookup fields.

These parameters are used internally to provide a flexible architecture and are exposed here for packaging reasons.


| Field | Description |
|-------------|---|
| Certificate | <p>Type string</p> <p>Properties Nillable</p> <p>Description If the value of the <code>ParameterType</code> field is <code>ClientCertificate</code> then this field references the certificate.</p> <p>Relationship Name Certificate</p> <p>Relationship Type Lookup</p> <p>Refers To Certificate</p> |

| Field | Description |
|---------------------------|---|
| Description | <p>Type string</p> <p>Properties Nillable</p> <p>Description A human-readable description of this named credential parameter.</p> |
| ExternalCredential | <p>Type string</p> <p>Properties Nillable</p> <p>Description If the value of the <code>ParameterType</code> field is <code>Authentication</code>, then this field references an external credential that in turn references a set of authenticated user credentials.</p> |
| OutboundNetworkConnection | <p>Type string</p> <p>Properties Nillable</p> <p>Description The lookup field for the <code>OutboundNetworkConnection</code> parameter type. Used when <code>namedCredentialType</code> is <code>PrivateEndpoint</code>.</p> |
| ParameterName | <p>Type string</p> <p>Properties Nillable</p> <p>Description Required. The name of the named credential parameter.</p> |
| ParameterType | <p>Type NamedCredentialParamType (enumeration of type string)</p> <p>Properties Nillable</p> <p>Description Required. The type of the named credential parameter. Valid values are:</p> |

| Field | Description |
|-----------------------------|---|
| | <ul style="list-style-type: none"> • AllowedManagedPackageNamespaces: Allows managed packages identified by specified namespaces to use the named credential and make callouts through it. • Authentication: Specifies that this parameter configures authentication using the credentials specified in the external credential, referenced by the <code>ExternalCredential</code> field. • ClientCertificate: Specifies that this parameter configures a client certificate, referenced by the <code>Certificate</code> field. • HTTPHeader: Allows the user to specify custom headers to be added to the callout at run time. When using <code>HTTPHeader</code>, the <code>ParameterName</code> field must be the header name as a string, and <code>ParameterValue</code> must be a formula of a header value that is evaluated at run time. • OutboundNetworkConnection: Specifies a lookup to an outbound network connection. When using this parameter type, the <code>OutboundNetworkConnection</code> field is a string representing the lookup. Used when <code>namedCredentialType</code> is <code>PrivateEndpoint</code>. • Url: Specifies that this parameter configures the URL of the endpoint. Store the actual URL in the <code>ParameterValue</code> field. |
| <code>ParameterValue</code> | <p>Type string</p> <p>Properties Nillable</p> <p>Description If the <code>ParameterType</code> field describes a literal value, such as <code>Url</code>, then the literal value is stored in this field, such as <code>https://iam.amazonaws.com/</code>.</p> |
| <code>SequenceNumber</code> | <p>Type int</p> <p>Properties Nillable</p> <p>Description Used to order <code>HTTPHeader</code> parameters.</p> |

ObjectHierarchyRelationship

Represents the mapping between an input source object and an output target object. For example, mapping details to transform a sales quote into a sales agreement. This object is available in API version 56.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.


Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|-----------------------------|--|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the object hierarchy relationship record.</p> <p>The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated object hierarchy relationship record in Metadata API.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| InputObjRecordsGrpFieldName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> |


| Field | Details |
|-------------|--|
| | <p>Description</p> <p>The field name of the input object that groups records.</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The language of the ObjectHierarchyRelationship.</p> |
| MappingType | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Specifies the type of relationship between the source and target object.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • ChildToChild—Child to Child • ParentToChild—Parent to Child • ParentToParent—Parent to Parent • Support <p>The default value is <code>ParentToParent</code>.</p> |
| MasterLabel | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>Label for the ObjectHierarchyRelationship record.</p> |
| Metadata | <p>Type</p> <p>complexvalue</p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>The ObjectHierarchyRelationship's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|--------------------------------|---|
| OutputPntRelationshipFieldName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Specifies the relationship between a child and parent for an output object.</p> |
| ParentRecordId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the parent object mapping record. This field is a relationship field.</p> <p>Relationship Name ParentRecord</p> <p>Relationship Type Lookup</p> <p>Refers To ObjectHierarchyRelationship</p> |
| ParentRelationshipFieldName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of the field that defines the relationship between a parent and child.</p> |
| SourceReferenceRelaFieldName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The field name that defines the relationship between the input and output object.</p> |
| UsageType | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Specifies the usage type.</p> |

| Field | Details |
|-------|--|
| | <p>Possible values are:</p> <ul style="list-style-type: none"> • <code>CLMFieldMapping</code> • <code>ConvertToSalesAgreement</code> • <code>EligibleProgramRebateType</code> • <code>MapJournalToMemberAggregate</code> • <code>TransformationMapping</code> |

OmniSupervisorConfig

Represents the Omni-Channel supervisor configuration for an assigned group of supervisors. This object is available in API version 57.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods


`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

To access this object, [Omni-Channel](#) must be enabled. Access to tooling objects requires Salesforce admin privileges or the Customize Application permission.

Fields

| Field | Details |
|----------------------------|---|
| <code>DeveloperName</code> | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes</p> |

| Field | Details |
|------------------|---|
| | <p>are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata type in Metadata API. The full name can include a namespace prefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsTimelineHidden | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If set to <code>true</code>, hides the agent timeline from the supervisors assigned to this supervisor configuration. The default value is <code>false</code>.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Possible values are the languages that Omni-Channel supports.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The label of the Omni-Channel supervisor configuration.</p> |
| Metadata | <p>Type <code>mns : OmniSupervisorConfig</code></p> |

| Field | Details |
|-----------------|--|
| | Properties Create, Nillable, Update Description The Omni-Channel supervisor configuration's metadata. |
| SkillVisibility | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort Description Determines which work items based on skills are visible to the supervisors assigned to this supervisor configuration. Possible values are: <ul style="list-style-type: none"> • AllSkills—Show work items with all skill requirements selected in this supervisor configuration. • AnySkill—Show work items with at least one skill requirement selected in this supervisor configuration. |

OperationLog

Represents long-running or asynchronous operations triggered and tracked through Tooling API. This object is available in API version 37.0 and later.

Supported SOAP Calls

`create()`, `describeSObjects()`

Supported REST HTTP Methods

Query, GET, POST

Special Access Rules

As of the Spring '20 release, to access OperationLog you must have the View Setup user permission.

Fields

| Field | Details |
|----------------|-----------------------|
| DetailedStatus | Type string |

| Field | Details |
|------------|---|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Complements the <code>Status</code> field with an operation processor-specific status code.</p> |
| Message | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Complements the <code>Status</code> field with information helpful to the user. For example, if <code>Status=FAILED</code>, state the reason in this field.</p> |
| Parameters | <p>Type OperationParameters</p> <p>Properties Create, Nillable</p> <p>Description A complex type that represents a set of parameters passed to the operation processor. Specify the parameters by using the OperationPayload value that corresponds to your operation type.</p> |
| Status | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Indicates the status of an operation triggered through Tooling API. Valid values are:</p> <ul style="list-style-type: none"> NEW RUNNING COMPLETED FAILED ABORTED <p>Only records with <code>Status=NEW</code> can be created through the API.</p> |
| Type | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> |

| Field | Details |
|-------|--|
| | <p>Description</p> <p>The type of operation submitted through Tooling API. For each operation type, use the corresponding payload of input parameters. Valid operation types are:</p> <p>RunTerritoryRules</p> <p>Runs account assignment rules for any territory that has rules defined and belongs to a territory model in Planning or Active state. When you run rules from Setup, accounts are assigned to territories according to your rules if your territory model is in Active or Planning state. Accounts are assigned to territories according to your rules automatically on account creation or update only if your territory model is in Active state.</p> <p>When you choose this operation type, use the payload Territory2RunTerritoryRulesPayload in the <code>Parameters</code> field.</p> <p>RunOppTerrAssignmentApex</p> <p>Uses filter-based opportunity territory assignment to assign territories to opportunities using a simple job. We provide code for an Apex class that you can use as-is or modify as needed based on our guidelines. After you create and deploy the class, run the job to complete the assignment process. Job options include making assignments within date ranges and assigning territories to open opportunities only.</p> <p>When you choose this operation type, use the payload Territory2RunOppTerrAssignmentApexPayload in the <code>Parameters</code> field.</p> |

changeOwnPassword

Represents the password details when users change their own passwords. Users can't use `setPassword()` to change their own passwords, and must use `changeOwnPassword()`. This type is available in API version 40.0 and later.

| Field | Details |
|--------------------------|--|
| <code>oldPassword</code> | <p>Type</p> <p>string</p> <p>Description</p> <p>The user's previous password that is being replaced.</p> |
| <code>newPassword</code> | <p>Type</p> <p>string</p> <p>Description</p> <p>The user's new password.</p> |

OperationParameters

Represents parameters to be passed to an operation triggered by Tooling API. This type is available in API version 37.0 and later.

| Field | Details |
|---------|--|
| payload | Type OperationPayload |
| | Description Use the payload that corresponds to the type of operation you want to trigger through Tooling API. Valid values are: <ul style="list-style-type: none"> • Territory2RunTerritoryRulesPayload • Territory2RunOppTerrAssignmentApexPayload |

OperationPayload

Represents a named set of input parameters, or *payload*, that corresponds to the operation type specified in the [Type](#) field of OperationLog. For example, if you choose the operation type [RunTerritoryRules](#), use the payload [Territory2RunTerritoryRulesPayload](#).

Payloads that are supported by OperationLog are extensions of the OperationPayload type. This type is available in API version 37.0 and later.

Territory2RunTerritoryRulesPayload

Represents a set of parameters to be specified when triggering a [RunTerritoryRules](#) operation through Tooling API. Extends the complex type [OperationPayload](#). This type is available in API version 37.0 and later.

| Field | Details |
|------------------|--|
| keyPrefix | Type string |
| | Description The key prefix of the entity on which the territory assignment rules should be run. The Account key prefix (001) is currently supported. |
| territoryId | Type string |
| | Description The TerritoryID of the <code>Planning</code> or <code>Active</code> territory model you want to run rules for. |
| territoryModelId | Type string |
| | Description The ID for the territory model the territory belongs to. You can run assignment rules on territory models in a <code>Planning</code> or <code>Active</code> state. |

Territory2RunOppTerrAssignmentApexPayload

Represents a set of parameters to be specified when triggering a [RunOppTerrAssignmentApex](#) operation through Tooling API. Extends the complex type [OperationPayload](#). This type is available in API version 37.0 and later.

| Field | Details |
|--|---|
| <code>excludeClosedOpportunities</code> | <p>Type string</p> <p>Description If <code>true</code>, excludes from the operation all opportunities that are already closed.</p> |
| <code>opportunityCloseDateFrom</code> | <p>Type string</p> <p>Description Use to filter opportunities based on a range of close dates. The operation applies to opportunities with close dates within the specified range. Use this field to specify a starting date for the range using the format <code>ddmmyyyy</code>.</p> |
| <code>opportunityCloseDateTo</code> | <p>Type string</p> <p>Description Use to filter opportunities based a range of close dates. The operation applies to opportunities with close dates within the specified range. Use this field to specify an ending date for the range using the format <code>ddmmyyyy</code>.</p> |
| <code>opportunityLastModifiedDateFrom</code> | <p>Type string</p> <p>Description Use to filter opportunities based a range of last-modified dates. The operation applies to opportunities with last-modified dates within the specified range. Use this field to specify a starting date for the range using the format <code>ddmmyyyy</code>.</p> |
| <code>opportunityLastModifiedDateTo</code> | <p>Type string</p> <p>Description Use to filter opportunities based a range of last-modified dates. The operation applies to opportunities with last-modified dates within the specified range. Use this field to specify an ending date for the range using the format <code>ddmmyyyy</code>.</p> |
| <code>territoryModelId</code> | <p>Type string</p> <p>Description The ID for the active territory model. Opportunities can be assigned to an active territory model only.</p> |

OpportunitySplitType

Represents labels and behavior for each split type Available in Tooling API version 37.0 and later.

This object is read only, and only available if Teamselling and Opportunity Splits are enabled.

There are 2 default split types: revenue splits, which must total 100%, and overlay splits, which can total any percentage.


Supported SOAP Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

GET

Fields

| Field Name | Details |
|---------------|--|
| Description | <p>Type</p> <p>textarea</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Update</p> <p>Description</p> <p>Describes the purpose of the split type, providing context to future developers.</p> |
| DeveloperName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Update</p> <p>Description</p> <p>Required. The unique name of the object in the API. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance slows down while Salesforce generates one for each record.</p> |
| IsActive | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> |

| Field Name | Details |
|------------------|--|
| | Description Enables or disables the split type. |
| IsTotalValidated | Type boolean Properties Create, Defaulted on create, Filter, Group, Sort Description If <code>true</code> , the split must total 100%. If <code>false</code> , the split can total any percentage. |
| Language | Type picklist Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update Description Indicates language of split labels in the user interface. |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort Description Indicates the manageable state of the specified component that is contained in a package: <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> • <code>installedEditable</code> • <code>released</code> • <code>unmanaged</code> This field is available in API version 38.0 and later. |
| MasterLabel | Type string Properties Create, Filter, Group, Sort, Update Description The user-interface label for the split type. |

| Field Name | Details |
|-----------------|---|
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. <p>This field can't be accessed unless the logged-in user has the Customize Application permission.</p> |
| SplitEntity | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description The containing record type, such as an opportunity. Available in API version 30 and later.</p> |
| SplitField | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description Indicates which currency field of the opportunity object is split. Available in API version 30 and later.</p> |
| SplitDataStatus | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort, Update</p> |

| Field Name | Details |
|------------|--|
| | Description Indicates the status of the split type. Available in API version 30 and later. |

OrgDomainLog

Represents a Salesforce org's previous My Domain. This object is available in API version 51.0 and later.

Supported SOAP API Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST API Methods

`GET`, `HEAD`, `Query`

Fields

| Field | Details |
|-----------------|--|
| DomainPartition | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort Description The partition for this org. When <code>none</code> , partitioned domains aren't enabled. Otherwise, My Domain hostnames include the partition value. For example, the format of a My Domain login hostname for a Developer Edition org with partitioned domains is <code>MyDomainName.develop.my.salesforce.com</code> . Possible values are: <ul style="list-style-type: none"> <code>demo</code>—Used in demo orgs with partitioned domains. <code>develop</code>—Used in Developer Edition orgs with partitioned domains. Also used in patch orgs where partitioned domains were deployed before Winter '24. <code>free</code>—Reserved for internal use. <code>none</code>—Indicates that this org doesn't use partitioned domains. <code>patch</code>—Reserved for future use. <code>sandbox</code>—Used in sandboxes with enhanced domains. These orgs are always partitioned. <code>scratch</code>—Used in scratch orgs with partitioned domains <code>sfdctest</code>—Reserved for internal use. <code>trailblaze</code>—Used in Trailblazer Playgrounds with partitioned domains. |

| Field | Details |
|----------------|---|
| | Available in API version 55.0 and later. |
| MyDomainName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description A previous My Domain name for the Salesforce org.</p> |
| ProdSuffixType | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description A previous Salesforce domain suffix, which is appended to the My Domain name. Possible values are:</p> <ul style="list-style-type: none"> • CloudforceLimited—cloudforce.com • DatabaseLimited—database.com • MySalesforce—my.salesforce.com with enhanced domains • MySalesforceLimited—my.salesforce.com without enhanced domains • OrgLevelCertificateLimited—my-salesforce.com • Restricted1—Reserved for future use. • Restricted2—Reserved for future use. |

Usage

To check for previous My Domain values for your org, first perform a GET request.

```
GET /services/data/v51.0/tooling/query?q=SELECT Id FROM OrgDomainLog
```

If that query returns a size of 1 or greater, previous My Domain values exist for the org. Each record represents a previous My Domain.

To use a GET request for the My Domain name and suffix, use this syntax with a OrgDomainLog record ID.

```
GET /services/data/v51.0/tooling/subjects/MyDomainLog/recordID
```

The following is an example response for a GET request querying a OrgDomainLog record ID.

```
{
  "attributes" : {
    "type" : "OrgDomainLog",
    "url" : "/services/data/v56.0/tooling/subjects/OrgDomainLog/9UXXXXXXXXXXXXXOAA"
  },
  "Id" : "9UXXXXXXXXXXXXXOAA",
  "IsDeleted" : false,
```

```

"CreateDate" : "2022-10-02T21:04:38.000+0000",
"CreatedById" : "005XXXXXXXXXXXXXIAG",
"LastModifiedDate" : "2022-10-02T21:04:38.000+0000",
"LastModifiedById" : "005XXXXXXXXXXXXXIAG",
"SystemModstamp" : "2022-10-02T21:04:38.000+0000",
"DomainPartition" : "none",
"MyDomainName" : "mycompany",
"ProdSuffixType" : "MySalesforceLimited"
}

```

OutboundNetworkConnection

Represents a private connection between a Salesforce org and a third-party data service. The connection is outbound because the callouts are going *out* of Salesforce. Available in API version 49.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObject()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETE GET PATCH POST

Fields

| Field | Details |
|----------------|--|
| ConnectionType | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Specifies the cloud provider of the connection. The only valid value is <code>AwsPrivateLink</code>.</p> |
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description A description of the connection. Maximum of 255 characters.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> |

| Field | Details |
|-----------------|--|
| | <p>Description</p> <p>The developer's internal name for the outbound network connection used in the API.</p> |
| FullName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Group, Nillable</p> <p>Description</p> <p>The full name of the associated type in Metadata API.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| isActive | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>Required. Specifies whether the connection is active (<code>true</code>) or not(<code>false</code>). The default value is <code>false</code>.</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The language of the connection. The value for this field is the language value of the org.</p> |
| ManageableState | <p>Type</p> <p>ManageableState enumerated list</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> • <code>installedEditable</code> • <code>released</code> |

| Field | Details |
|-----------------|--|
| | <ul style="list-style-type: none"> unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The internal label for the connection.</p> |
| Metadata | <p>Type mns:OutboundNetworkConnection</p> <p>Properties Create, Nillable, Update</p> <p>Description Provides access to the associated type and related fields in Metadata API.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the connection. An outbound network connection can be in an extension namespace different than the object.</p> |
| Status | <p>Type picklist</p> <p>Properties Filter, Group, Restricted Picklist, Sort</p> <p>Description Required. Connection status. The connection is initially Unprovisioned and moves through the other states automatically after an admin performs a provision, sync, or teardown action. The valid values are:</p> <ul style="list-style-type: none"> Unprovisioned Allocating PendingAcceptance PendingActivation RejectedRemotely DeletedRemotely TeardownInProgress Ready |

OutboundNetworkConnProperty

Represents a name-value pair that describes the properties of the outbound network connection. Available in API version 49.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObject()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETEGETPATCHPOST

Fields

| Field | Details |
|-----------------------------|---|
| OutboundNetworkConnectionId | Type reference Properties Create, Filter, Group, Sort Description Required. The ID of the corresponding OutboundNetworkConnection. |
| PropertyName | Type picklist Properties Create, Filter, Group, Restricted picklist, Sort Description The name of a property used to establish to an OutboundNetworkConnection. Valid values are: <ul style="list-style-type: none">• <code>AwsVpcEndpointId</code>—The unique endpoint ID provided by Salesforce after an outbound AwsPrivateLink is created.• <code>AwsVpcEndpointServiceName</code>—The name of the customer's endpoint service running in an AWS VPC that's used for private connections with Salesforce.• <code>Region</code>—The region in which the VPC is hosted. |
| PropertyValue | Type textarea Properties Create, Nillable, Update Description The value of <code>PropertyName</code> . For example, the <code>PropertyValue</code> of <code>Region</code> might be <code>us-west-2</code> . |

OwnerChangeOptionInfo

Represents default and optional actions that can be performed when a record's owner is changed. Available in Tooling API version 35.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`

Supported REST HTTP Methods

`Query`

Special Access Rules

OwnerChangeOptionInfo is accessible in Tooling API to user profiles with the View Setup and Configuration permission.

Fields

| Field | Details |
|------------------|---|
| DefaultValue | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Default value of the checkbox for this option in the user interface.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| EntityDefinition | <p>Type EntityDefinition</p> <p>Properties Filter, Group, Sort</p> <p>Description The object to which this change applies.</p> |

| Field | Details |
|--------------------|---|
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the EntityDefinition containing the record.</p> |
| IsEditable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether this option is editable by the user when updating the owner using the <code>OwnerChangeOptions</code> SOAP header.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The label that corresponds to the option in the user interface.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique name for the option.</p> |
| ParentId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The durable ID of the parent OwnerChangeOptionInfo record. Available in Tooling API version 44.0 and later.</p> |

Example

Retrieve all the change options for contacts.

```
SELECT Id, Name, Label, IsEditable, DefaultValue, EntityDefinition.QualifiedApiName
FROM OwnerChangeOptionInfo
WHERE EntityDefinition.QualifiedName='Contact'
```

Retrieve the change options for opportunities.

```
SELECT DurableId,EntityDefinitionId,IsEditable,Label,Name,ParentId
FROM OwnerChangeOptionInfo
WHERE EntityDefinitionId.DurableId = 'Opportunity'
```

PackageInstallRequest

Represents a request to install a package (first- or second-generation) in a target subscriber org. Available in API version 41.0 and later.


Supported SOAP Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

GET, POST, Query

Fields

| Field | Details |
|-----------------|---|
| ApexCompileType | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort</p> <p>Description</p> <p>For unlocked package installs and upgrades, specifies whether to require successful compilation of all Apex in the org, or only Apex within the package.</p> <p>Valid values are:</p> <ul style="list-style-type: none"> all package <p> Note: For package installs into production orgs, or any org that has Apex Compile on Deploy enabled, the platform compiles all Apex in the org after the package install or upgrade operation completes. This approach assures that package installs and</p> |

| Field | Details |
|------------------------|--|
| | <p>upgrades don't impact the performance of an org, and is done even if <code>--apexcompile package</code> is specified.</p> <p>Available in API version 46.0 and later.</p> |
| EnableRss | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort</p> <p>Description Specifies whether the package can send and receive Remote Site Settings (RSS) and Content Security Policy (CSP) data from third-party websites (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>. Available in API version 43.0 and later.</p> |
| Errors | <p>Type SubscriberPackageInstallErrors</p> <p>Properties Nillable</p> <p>Description Errors that occurred during installation, if any.</p> |
| NameConflictResolution | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description Controls name conflicts between package members in an unmanaged package. Valid values are:</p> <ul style="list-style-type: none"> • <code>Block</code>: Throw an exception on name conflicts. • <code>RenameMetadata</code>: Rename only those components that can be renamed, otherwise throw an exception. |
| PackageInstallSource | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description For internal use only.</p> |
| Password | <p>Type string</p> |

| Field | Details |
|-----------------------------|---|
| | <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description The installation key for the package. Required for packages that are protected by an installation key.</p> |
| ProfileMappings | <p>Type SubscriberPackageProfileMappings</p> <p>Properties Create, Nillable</p> <p>Description Mappings between profile settings in the package and profiles in the subscriber org. When installing a package, the admin for the subscriber org chooses which profiles in the org to map the profile settings in the package to.</p> |
| SecurityType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description Users for which this package is installed. Valid values are:</p> <ul style="list-style-type: none"> • Custom: Installed for specified custom profiles. • Full: Installed for all users. • None: Installed for administrators only. |
| Status | <p>Type picklist</p> <p>Properties Group, Nillable, Restricted picklist, Sort</p> <p>Description The status of the install request. Valid values are:</p> <ul style="list-style-type: none"> • Error • InProgress • Success • Unknown |
| SubscriberPackageVersionKey | <p>Type string</p> |

| Field | Details |
|-------------|--|
| | Properties Create, Filter, Group, Sort |
| | Description Foreign key to the subscriber package version. |
| UpgradeType | Type string |
| | Properties Create, Filter, Group, Nillable, Sort |
| | Description For unlocked package upgrades, specifies whether to mark all removed components as deprecated (<code>deprecate-only</code>), delete removed components that can be safely deleted and deprecate the others (<code>mixed-mode</code>), or delete all removed components (<code>delete-only</code>). The default is <code>mixed-mode</code> . Valid values are: <ul style="list-style-type: none">• <code>delete-only</code>• <code>deprecate-only</code>• <code>mixed-mode</code> |

SubscriberPackageInstallErrors

Represents the list of errors that occurred during package installation.

| Field | Details |
|--------|--|
| errors | Type SubscriberPackageInstallError |
| | Description The errors that occurred during package install. |

SubscriberPackageInstallError

Represents a single error that occurred during package installation.

| Field | Details |
|---------|--|
| message | Type string |
| | Description Required. Describes the error that occurred. |

SubscriberPackageProfileMappings

Represents the list of profile mappings for which this package is installed.

| Field | Details |
|-----------------|--|
| profileMappings | Type SubscriberPackageProfileMapping Description Name of the profile mapping. |

SubscriberPackageProfileMapping

Represents a mapping between a profile in the package that is being installed and the profile in the target subscriber org.

| Field | Details |
|--------|--|
| source | Type string Description Required. The name of the profile setting in the package that is being installed. |
| target | Type string Description Required. The name of the profile in the target subscriber org. |

PackageUploadRequest

Represents a request to upload a first-generation package version and its components so that subscribers can install it. Available in API version 38.0 and later.

Supported SOAP Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

Query, GET, POST

Fields

| Field | Details |
|-------------------|--|
| Description | <p>Type textarea</p> <p>Properties Create, Nillable</p> <p>Description A description of the package and what this version contains.</p> |
| Errors | <p>Type complexvalue</p> <p>Properties Nillable</p> <p>Description Errors that occurred during upload, if any.</p> |
| IsReleaseVersion | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort</p> <p>Description For managed packages only. Indicates whether the managed package is a released version (<code>true</code>) or a beta version (<code>false</code>). The default is <code>false</code>.</p> |
| MajorVersion | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description The first number in a package version number. A version number either has an <code>x.y</code> format or an <code>x.y.z</code> format. The <code>x</code> represents the major version, <code>y</code> the minor version, and <code>z</code> the patch version. (The patch version can't be specified; it's automatically assigned when a managed beta is uploaded.) If <code>IsReleaseVersion</code> is <code>false</code>, <code>MajorVersion</code> is ignored. If <code>IsReleaseVersion</code> is <code>true</code>, and a managed beta is the latest uploaded version for the package, the major version must match the major version of the last uploaded beta.</p> |
| MetadataPackageId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> |

| Field | Details |
|--------------------------|--|
| | Description The 18-character package ID, which starts with 033. |
| MetadataPackageVersionId | Type reference Properties Filter, Group, Nillable, Sort Description The 18-character package version ID representing the non-deprecated package you're uploading. |
| MinorVersion | Type int Properties Create, Filter, Group, Nillable, Sort Description The second number in a package version number. A version number either has an <code>x.y</code> format or an <code>x.y.z</code> format. The <code>x</code> represents the major version, <code>y</code> the minor version, and <code>z</code> the patch version. (The patch version can't be specified; it's automatically assigned when a managed beta is uploaded.) If <code>MinorVersion</code> isn't specified, the default value is 1 more than the minor version of the currently released package (0 if not released). If <code>IsReleaseVersion</code> is <code>false</code> , <code>MinorVersion</code> is ignored. If <code>IsReleaseVersion</code> is <code>true</code> and a managed beta is the latest uploaded version for the package, the minor version must match the minor version of the last uploaded beta. |
| Password | Type string Properties Create, Filter, Group, Nillable, Sort Description An optional installation key for sharing the package privately with anyone who has the password value. Don't include the password if you want to make the package available to anyone on AppExchange and share your package publicly. |
| PostInstallUrl | Type textarea Properties Create, Nillable Description The fully qualified URL of the post-installation instructions. Instructions are shown as a link after installation and are available from the package detail view. |

| Field | Details |
|-----------------|---|
| ReleaseNotesUrl | <p>Type textarea</p> <p>Properties Create, Nillable</p> <p>Description The fully qualified URL of the package release notes. Release notes are shown as a link during the installation process and are available from the package detail view after installation.</p> |
| Status | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The status of the upload. Valid values are:</p> <ul style="list-style-type: none"> • Error • In Progress • Queued • Success |
| VersionName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description Required. The name of the package version. Example: Spring 2016.</p> |

Usage

Suppose that you want to upload version 1.3 of your managed package. Let's write some code to create a package upload request, upload the package version, and poll the status of the upload until it completes.

First, let's set some variables for the request object.

```
static private final String packageId = "033xx0000000710";
static private final Integer packageMajorVersionNumber = 1;
static private final Integer packageMinorVersionNumber = 3;
static private final Boolean isReleaseVersion = true;
static private final String packageVersionDescriptionSuffix =
    isReleaseVersion ? "" : "beta";
static private final String packageVersionDescription =
    "r" + packageMinorVersionNumber + packageVersionDescriptionSuffix;
static private final String packageDescription =
    String.format("This is the most amazing package in the world! ",
        "And %s is the most amazing release so far! ",
```

```

        packageVersionDescription);
static private final String packageReleaseNotesUrl = "https://www.example.com";
static private final String packagePostInstallUrl = "https://www.example.com";

// Leave blank or null for no password
static private final String packagePassword = "";

static private final String baseUrl = "https://MyDomainName.my.salesforce.com:6109";

```

Now let's create the upload request and start the upload. This code sample uses the Web Services Connector (WSC).

```

PackageUploadRequest packageUploadRequest = new PackageUploadRequest();
packageUploadRequest.setMetadataPackageId(packageId);
packageUploadRequest.setVersionName(packageVersionDescription);
packageUploadRequest.setDescription(packageDescription);
packageUploadRequest.setMajorVersion(packageMajorVersionNumber);
packageUploadRequest.setMinorVersion(packageMinorVersionNumber);
packageUploadRequest.setPostInstallUrl(packagePostInstallUrl);
packageUploadRequest.setReleaseNotesUrl(packageReleaseNotesUrl);
packageUploadRequest.setIsReleaseVersion(isReleaseVersion);
packageUploadRequest.setPassword(packagePassword);

SObject[] argArray = {packageUploadRequest};
SaveResult[] saveResults = connection.create(argArray);

if (saveResults[0].isSuccess()) {
    // The save result contains the ID of the created request.
    // Save it in the local request.
    packageUploadRequest.setId(saveResults[0].getId());
    System.out.println("PackagePushRequest created, ID: "
        + saveResults[0].getId());
} else {
    for (Error error : saveResults[0].getErrors()) {
        System.out.println(error.getMessage());
    }
}

```

Checking the Status of an Upload Request

```

// Find the status of the PackageUploadRequest for a given ID
String query = String.format("SELECT Status,MetadataPackageVersionId
    FROM PackageUploadRequest WHERE Id = '%s'", packageUploadRequest.getId());

boolean inProgress = false;
boolean queued = false;
boolean done = false;
while (true) {
    QueryResult queryResult = connection.query(query);

    PackageUploadRequest updatedPackageUploadRequest =
        (PackageUploadRequest) queryResult.getRecords()[0];

    PackageUploadRequestStatus status = updatedPackageUploadRequest.getStatus();
    switch (status) {
        case Success:

```

```

        System.out.println(String.format("Package upload %s completed",
            packageUploadRequest.getId()));
        System.out.println(String.format(
            "Package install url: %s/packaging/installPackage.apexp?p0=%s",
            baseUrl,
            updatedPackageUploadRequest.getMetadataPackageVersionId()));
        done = true;
        break;

    case Error:
        PackageUploadErrors errors = updatedPackageUploadRequest.getErrors();

        if (errors.getErrors().length == 0) {
            System.out.println(String.format(
                "%s: For upload of package %s, no further information available",
                updatedPackageUploadRequest.getStatus(),
                packageUploadRequest.getId()));
        }
        else {
            System.out.println(String.format(
                "%s: For upload of package %s",
                updatedPackageUploadRequest.getStatus(),
                packageUploadRequest.getId()));
            for (PackageUploadError error : errors.getErrors()) {
                System.out.println("Error detail: " + error.getMessage());
            }
        }
        assertTrue("Upload failure occurred", false);
        break;

    case Queued:
        if (!queued) {
            System.out.println(String.format("Package upload %s enqueued",
                packageUploadRequest.getId()));
            queued = true;
        }
        break;

    case InProgress:
        if (!inProgress) {
            System.out.println(String.format("Package upload %s started",
                packageUploadRequest.getId()));
            inProgress = true;
        }
        break;

    case Unknown:
        System.out.println("Unexpected package upload status: " +
            updatedPackageUploadRequest.getStatus());
    }

    if (done) break;

    try {

```

```
        Thread.sleep(1000);
    } catch (InterruptedException e) {
        // ignore interruptions
    }
}
```

PackageVersionUninstallRequestError

Represents an error encountered while requesting an uninstall of a Package2Version (second-generation package version). Available in API version 41.0 and later.

Supported SOAP Calls

describeSObjects(), query(), retrieve()

Supported REST HTTP Methods


GET, Query

Fields

| Field | Details |
|-----------------|---|
| Message | <div>Typestring</div> <div>PropertiesFilter, Nillable, Sort</div> <div>DescriptionThe error that was encountered during the request of an uninstall of the second-generation package version.</div> |
| ParentRequestId | <div>TypeID</div> <div>PropertiesFilter, Group, Nillable, Sort</div> <div>DescriptionThe ID of the SubscriberPackageVersionUninstallRequest object associated with this error. The ID starts with the string 06y.</div> |

PathAssistant

Represents a Path. Available in Tooling API version 36.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. Because changing terms in our code can break current implementations, we maintained this object's name.

Supported SOAP Calls

`retrieve()`, `query()`

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|---------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the path in the API.</p> |
| FullName | <p>Type string</p> <p>Properties Group, Nillable</p> <p>Description The name of the path in the Metadata API. Query this field only if the query result contains no more than 1 record. Otherwise, an error is returned. If more than 1 record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the path is active (true) or inactive (false).</p> |
| IsDeleted | <p>Type boolean</p> <p>Properties Sort</p> |

| Field | Details |
|--------------------|---|
| | Description Indicates whether the record has been moved to the Recycle Bin (true) or not (false). |
| IsMasterRecordType | Type boolean Properties Defaulted on create, Filter, Group, Sort Description Indicates whether this path is for the main record type (true) or not (false). |
| Language | Type string Properties Filter, Group, Restricted picklist, Sort Description The language of the path. Valid values are: <ul style="list-style-type: none"> Chinese (Simplified): zh_CN Chinese (Traditional): zh_TW Danish: da Dutch: nl_NL English: en_US Finnish: fi French: fr German: de Italian: it Japanese: ja Korean: ko Norwegian: no Portuguese (Brazil): pt_BR Russian: ru Spanish: es Spanish (Mexico): es_MX Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: sv Thai: th The Salesforce user interface is fully translated to Thai, but Help is in English. |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort |

| Field | Details |
|-----------------|---|
| | <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>Label for this path.</p> |
| Metadata | <p>Type</p> <p>msn:PathAssistant</p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>Path metadata from the msn namespace.</p> <p>Query this field only if the query result contains no more than 1 record. Otherwise, an error is returned. If more than 1 record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This |

| Field | Details |
|----------------------------------|--|
| | <p>field's value is the namespace prefix of the Developer Edition org of the package developer.</p> <ul style="list-style-type: none"> In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. <p>This field can't be accessed unless the logged-in user has the "Customize Application" permission.</p> |
| <code>RecordTypeId</code> | <p>Type ID</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique identifier for a record type.</p> |
| <code>SubjectProcessField</code> | <p>Type string</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Name of the picklist field which determines the steps you can use in the path. For example, <code>OpportunityStage</code> in the case of opportunities or <code>LeadStatus</code> in the case of leads.</p> |
| <code>SubjectType</code> | <p>Type string</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The object this path relates to. Valid values are: <code>Opportunity</code>, <code>Lead</code>, <code>Quote</code>, or the API name of a custom object.</p> |

Package2

Represents a second-generation managed package or an unlocked package in a Dev Hub org. Values for all fields are visible to the subscriber. Available in API version 41.0 and later.

Supported SOAP Calls

`create()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

Query, GET, POST

Fields

| Field | Details |
|------------------|---|
| ContainerOptions | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description Container options for the second-generation package. These options determine the upgrade and editability rules. The default value is <code>Managed</code>.</p> <p>Valid values include:</p> <ul style="list-style-type: none"> • <code>Managed</code> (developer-managed, subscriber-managed) • <code>Unlocked</code> (developer-controlled, subscriber-editable) |
| Description | <p>Type string</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description Description of the package.</p> |
| IsDeprecated | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Specifies whether this package has been marked as deprecated (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> <p>If you set <code>IsDeprecated</code> to <code>true</code> for a package, the package and all of its child package versions are deprecated.</p> <p>If you set <code>IsDeprecated</code> to <code>false</code> for a package, the package and all of its child package versions are undeprecated. However, if <code>IsDeprecated</code> is explicitly set to <code>true</code> for a package version <i>after</i> its parent package is deprecated, the child remains deprecated even if you undeprecate its parent.</p> <p>If you set <code>IsDeprecated</code> to <code>false</code> for a package version whose parent package is deprecated, the package version's <code>IsDeprecated</code> value remains <code>true</code> until its parent is undeprecated.</p> |

| Field | Details |
|----------------------|---|
| | <p>Deprecated package versions that have been installed in subscriber orgs continue to function, but new installations of deprecated package versions are blocked.</p> |
| IsOrgDependent | <p>Type boolean</p> <p>Properties Filter, Group, Sort</p> <p>Description Indicates whether the package depends on unpackaged metadata in the installation org (<code>true</code>) or not (<code>false</code>). This field only applies to unlocked packages. The default value is <code>false</code>. Available in API version 49.0 and later.</p> |
| Name | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Name of the package. Unlike a typical developer name, this value is mutable and can contain special characters.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description Namespace prefix that identifies the components of your package in the subscriber's org.</p> |
| PackageErrorUsername | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The email address for an active user in the Dev Hub org you want to receive email notification regarding package-related errors. You can set the field when creating a package and update it later.</p> |
| SubscriberPackageID | <p>Type reference</p> <p>Properties Filter, Group, Sort, Unique</p> <p>Description ID that identifies this package across all Salesforce instances (starts with 033).</p> |

| Field | Details |
|----------------|---|
| | This value is case-sensitive and must be unique. |
| WasTransferred | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the package was previously associated with a different Dev Hub org. For details, see: Transfer a Second-Generation Managed Package to a Different Dev Hub. This field is available in API version 57.0 and later. The default value is <code>false</code>.</p> |

Usage

Subscribers install package versions ([Package2Version](#) on page 583s) in their orgs.

Package2Member

Represents a component in a second-generation managed package in a subscriber's org. Created when the subscriber installs the package. Available in API version 41.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

Query, GET

Fields

| Field | Details |
|-------------------------|---|
| CurrentPackageVersionId | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description The ID of the current SubscriberPackageVersion.</p> |
| MaxPackageVersionId | <p>Type reference</p> |

| Field | Details |
|------------------------|---|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Indicates the last package version that a metadata component was contained in. It's set if the object is left in the subscriber org after upgrade. For example, if the package developer removes an Apex class, that class and its Package2Member are hard deleted. However, to avoid data loss, we don't delete schema objects.</p> |
| MinPackageVersionId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the first SubscriberPackageVersion that contained this Package2Member. Starts with 04t.</p> |
| SubjectId | <p>Type reference</p> <p>Properties Filter, Group, Sort, Unique</p> <p>Description The ID of the component that this Package2Member is referencing. This value is case-sensitive and must be unique.</p> |
| SubjectKeyPrefix | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The key prefix for the component that this Package2Member is referencing—for example, 01w for an ActionEmail component or 01Q for a WorkflowRule component.</p> |
| SubjectManageableState | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The manageability state of this Package2Member. References ManageableStateEnum. Valid values include:</p> <ul style="list-style-type: none"> • <code>beta</code>—Not applicable. (Used only for first-generation packages.) • <code>deleted</code>—Not applicable. (Used only for first-generation packages.) |

| Field | Details |
|----------------------------------|--|
| | <ul style="list-style-type: none"> • <code>deprecated</code>—Installed as part of a second-generation managed package, and later deprecated from the package. • <code>deprecatedEditable</code>—Installed as part of an unlocked package, and later deprecated from the package. • <code>installed</code>—Installed as part of a second-generation managed package. • <code>installedEditable</code>—Installed as part of an unlocked package. For components in unlocked packages, an admin can make modifications, but all changes are overwritten by the next upgrade. • <code>released</code>—Not applicable. (Used only for first-generation packages.) • <code>unmanaged</code>—Not applicable. (Used only for first-generation packages.) |
| <code>SubscriberPackageId</code> | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description ID that identifies this package across all Salesforce instances (starts with 033).</p> |

Package2Version

Represents a second-generation package version in a Dev Hub org. Values for all fields except for `Tag` and `Branch` are visible to the subscriber. Available in API version 41.0 and later.

Supported SOAP Calls

`query()`, `retrieve()`, `update()`

Supported REST HTTP Methods

Query, GET, POST

Fields

| Field | Details |
|-------------------------|---|
| <code>AncestorId</code> | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the immediate parent of the package version in the package ancestry tree.</p> |

| Field | Details |
|------------------------|---|
| Branch | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort, Update</p> <p>Description The branch associated with this package version. Can be used to create a tree structure of inheritance. This value is auto-populated from Package2VersionCreateRequest, but you can update it.</p> |
| BuildDurationInSeconds | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort,</p> <p>Description Measured in seconds, this field indicates how long the build for this package version took. This field is new in API version 51.0.</p> |
| BuildNumber | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description Part of the version number of a package version. The complete version number format is major.minor.patch (Beta build)—for example, 1.2.0 (Beta 5). For released packages, version numbers contain only <i>major.minor.patch</i>, or, if <i>patch</i> is 0, <i>major.minor</i>—for example, 1.2.</p> |
| CodeCoverage | <p>Type complexvalue</p> <p>Properties Nillable</p> <p>Description Percentage of lines of Apex code in the package version that are covered by tests. The value is <code>null</code> if code coverage wasn't run when the package version was created. For second-generation managed packages, a minimum 75% code coverage is required for package version promotion.</p> |
| CodeCoveragePercentage | <p>Type complexvalue</p> <p>Properties Nillable</p> |

| Field | Details |
|----------------------------|--|
| | <p>Description</p> <p>Provides code coverage details for each Apex class in the package version.</p> <p>The value is null if code coverage wasn't run when the package version was created, or if there's no Apex code in the package.</p> |
| Description | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Nillable, Sort, Update</p> <p>Description</p> <p>Description of the package.</p> |
| HasMetadataRemoved | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>For managed packages only, this field returns <code>true</code> when one or more managed metadata components included in the package version's ancestor aren't included in this package version. This field doesn't apply to unlocked packages. Available in API version 51.0.</p> |
| HasPassedCodeCoverageCheck | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>Returns <code>true</code> if code coverage tests were run when the package version was created, and the resulting code coverage percentage is 75% or greater. Otherwise, returns <code>false</code>.</p> <p>For second-generation managed packages, a minimum 75% code coverage is required for package version promotion.</p> |
| InstallKey | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>Installation key for creating the key-protected package. The default is null.</p> <p>If you query for this value, the returned value is always <code>null</code> (for security reasons). The value can be set and reset but not read.</p> |
| IsDeprecated | <p>Type</p> <p>boolean</p> |

| Field | Details |
|----------------------------------|---|
| | <p>Properties Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Specifies whether this package version has been marked as deprecated (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> <p>If you set <code>IsDeprecated</code> to <code>true</code> for a package, the package and all of its child package versions are deprecated.</p> <p>If you set <code>IsDeprecated</code> to <code>false</code> for a package, the package and all of its child package versions are undeprecated. However, if <code>IsDeprecated</code> is explicitly set to <code>true</code> for a package version <i>after</i> its parent package is deprecated, the child remains deprecated even if you undeprecate its parent.</p> <p>If you set <code>IsDeprecated</code> to <code>false</code> for a package version whose parent package is deprecated, the package version's <code>IsDeprecated</code> value remains <code>true</code> until its parent is undeprecated.</p> <p>Deprecated package versions that have been installed in subscriber orgs continue to function, but new installations of deprecated package versions are blocked.</p> |
| <code>IsPasswordProtected</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Specifies whether installation of this package version requires the user to provide an installation key (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| <code>IsReleased</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether the package version is released (<code>true</code>) or in beta (<code>false</code>).</p> |
| <code>Language</code> | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language for the package.</p> <p>If a language wasn't specified, the language defaults to the language of the Dev Hub user who created the package. This field is available in API version 57.0 and later.</p> |

| Field | Details |
|--------------|---|
| MajorVersion | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description Part of the version number of a package version. The complete version number format is major.minor.patch (Beta build)—for example, 1.2.0 (Beta 5). For released packages, version numbers contain only <i>major.minor.patch</i>, or, if <i>patch</i> is 0, <i>major.minor</i>—for example, 1.2.</p> |
| MinorVersion | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description Part of the version number of a package version. The complete version number format is major.minor.patch (Beta build)—for example, 1.2.0 (Beta 5). For released packages, version numbers contain only <i>major.minor.patch</i>, or, if <i>patch</i> is 0, <i>major.minor</i>—for example, 1.2.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, Sort, Update</p> <p>Description Name of the package.</p> |
| Package2Id | <p>Type reference</p> <p>Properties Filter, Group, Sort</p> <p>Description ID of the parent package (starts with 0Ho).</p> |
| PatchVersion | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description Part of the version number of a package version. The complete version number format is major.minor.patch (Beta build)—for example, 1.2.0 (Beta 5). For</p> |

| Field | Details |
|----------------------------|--|
| | <p>released packages, version numbers contain only <i>major.minor.patch</i>, or, if <i>patch</i> is 0, <i>major.minor</i>—for example, 1.2.</p> <p>Currently, the only valid value is 0.</p> |
| ReleaseVersion | <p>Type double</p> <p>Properties Filter, Group, Sort</p> <p>Description Indicates the Salesforce release version used to create the package version. The value is in the format of a Salesforce API version number, for example, “51.0.” This field is new in API version 51.0.</p> |
| SnapshotName | <p>Description Reserved for future use.</p> |
| SubscriberPackageVersionId | <p>Type reference</p> <p>Properties Filter, Group, Sort, Unique</p> <p>Description ID that subscribers use to install the package version (starts with 04t). This value is read-only.</p> |
| Tag | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort, Update</p> <p>Description The package version’s tag. This value is auto-populated from Package2VersionCreateRequest, but you can update it.</p> |
| ValidationSkipped | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, validation is skipped during package version creation. Skipping validation reduces the time it takes to create a new package version, but package versions created without validation can’t be promoted to the released state. This field is available in API version 48.0 and later. The default value is <code>false</code>.</p> |

| Field | Details |
|-------|--|
| | You can't specify both skip validation and code coverage, because code coverage is calculated during validation. |

Package2VersionCreateRequest

Represents a request to create a second-generation managed package or an unlocked package version in a Dev Hub org. Available in API version 41.0 and later.

Supported SOAP Calls

`create()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods


Query, GET, POST

Fields

| Field | Details |
|-----------------------|---|
| Branch | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The branch to associate with this package version. Can be used to create a tree structure of inheritance. Upon successful creation of a Package2Version, this value is copied to the package version's <code>Branch</code> field. The default value is <code>null</code>.</p> |
| CalculateCodeCoverage | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, code coverage is calculated during package version creation. If <code>false</code>, code coverage isn't calculated. For second-generation managed packages, a minimum 75% code coverage is required for package version promotion. This field is available in API version 47.0 and later.</p> |

| Field | Details |
|---------------------|--|
| InstallKey | <p>Type encryptedstring</p> <p>Properties Create, Nillable</p> <p>Description Installation key for installing a key-protected package. The default is <code>null</code>. Used only on insert. If you query for this value, <code>null</code> is always returned (for security reasons). The default value is <code>null</code>.</p> |
| IsPasswordProtected | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Specifies whether installation of this package version requires the user to provide an installation key (<code>true</code>) or not (<code>false</code>). The default value is <code>null</code>.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language for the package. The picklist values match the Fully Supported Languages listed in <i>Salesforce Help</i>. If no language is specified, the language defaults to the language of the Dev Hub user who created the package. This field is available in API version 57.0 and later.</p> |
| Package2Id | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description A reference to an ID for the Package2 to create a version of. The default value is <code>null</code>.</p> |
| Package2VersionId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field | Details |
|----------------|---|
| | <p>Description</p> <p>A reference to an ID for the Package2Version that this request creates (starts with 05i).</p> <p>The default value is <code>null</code>.</p> |
| SkipValidation | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, validation is skipped during package version creation. Skipping validation reduces the time it takes to create a new package version, but package versions created without validation can't be promoted to the released state. This field is available in API version 48.0 and later.</p> <p>The default value is <code>false</code>.</p> <p>You can't specify both skip validation and code coverage, because code coverage is calculated during validation.</p> |
| SourceOrg | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The ID of the org whose shape (features, settings, limits, and licenses) information is used for creating scratch orgs used to validate metadata during creation of a second-generation managed package or unlocked package. This field is available in API version 50.0 and later.</p> |
| Status | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The status of the Package2Version creation request. Valid values include:</p> <ul style="list-style-type: none"> Queued InProgress Success Error <p>The default value is <code>null</code>.</p> |
| Tag | <p>Type</p> <p>string</p> |

| Field | Details |
|-------------|---|
| | Properties Create, Filter, Group, Nillable, Sort, Update Description Optional tags for the package version. The default value is <code>null</code> . |
| VersionInfo | Type base64 Properties Create Description The blob that stores details about the package version. The default value is <code>null</code> .  Note: When you query <code>Package2VersionCreateRequest</code> , data from <code>VersionInfo</code> isn't returned. |

Package2VersionCreateRequestError

Represents an error encountered while creating a second-generation managed package or an unlocked package version. Available in API version 41.0 and later.

Supported SOAP Calls

`query()`, `retrieve()`

Supported REST HTTP Methods

Query, GET


Fields

| Field | Details |
|---------|--|
| Message | Type textarea Properties Filter, Nillable, Sort Description The error that was encountered during the creation of a package version. |

| Field | Details |
|-----------------|---|
| ParentRequestId | Type reference Properties Filter, Group, Nillable, Sort Description The ID of the Package2VersionCreateRequest that encountered an error. |

PardotTenant

Represents an Account Engagement business unit. This object is available in API version 56.0 and later.

 **Note:** Pardot is now known as Marketing Cloud Account Engagement. We wish we could snap our fingers to update the name everywhere, but you can expect to see the previous name in a few places, including API names and developer resources.

Use available SOAP calls to create new business units, and query and update information in existing business units.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

PardotTenant is available to customers with any Account Engagement edition.

Fields

| Field | Details |
|----------------|---|
| CreationStatus | Type picklist Properties Create, Defaulted on create, Filter, Group, Restricted picklist, Sort, Update Description The operational status of the business unit managed by Account Engagement. Possible values are: |

| Field | Details |
|----------------------|--|
| | <ul style="list-style-type: none"> • Backfilled • Created • Creating • Deleted • Deleting • Deprovisioned • Deprovisioning • Error • Updated • Updating <p>The default value is <code>Creating</code>.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Universally unique identifier for this object. If an object does not provide a value for this field on INSERT, a value will be auto-generated for it.</p> |
| InitialPardotAdminId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort</p> <p>Description The Salesforce user who set up the business unit. This field is a relationship field.</p> <p>Relationship Name InitialPardotAdmin</p> <p>Relationship Type Lookup</p> <p>Refers To User</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The language of the business unit.</p> |

| Field | Details |
|------------------------|---|
| MasterLabel | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Update</p> <p>Description</p> <p>The name of the Account Engagement business unit. This field syncs with the PardotTenantName field.</p> |
| PardotTenantId | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The numerical identifier for the business unit.</p> |
| PardotTenantName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Update</p> <p>Description</p> <p>The name of the Account Engagement business unit. This field syncs with the MasterLabel field.</p> |
| PardotTenantStatusCode | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The operational status of the business unit.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• InsufficientLicenseLimits• InvalidRequest• PardotAccountNotFound• UnknownError• UsernameCollision |

Usage

To create an Account Engagement business unit, set a valid user ID for the InitialPardotAdminID field and a value for PardotTenantName. If you have multiple business units, the PardotTenantName value must be unique.

To verify the status of a business unit, query the `PardotTenantID`. A return value of `CREATING` means the business unit is being created. A return value of `CREATED` means the business unit has been created.

Update capabilities are limited to changing the `PardotTenantName` field and deleting a business unit if an error occurs upon creation. To delete the `PardotTenant`, one of these scenarios must be true:

- The `CreationStatus` has a value of `ERROR`.
- The `CreationStatus` has a value of `CREATING`, `UPDATING`, or `DELETING`, and the system hasn't updated the tenant in the last hour.

PathAssistantStepInfo

Represents guidance for a step on a Path. Available in Tooling API version 36.0 and later.

Supported SOAP Calls

`update()`, `query()`

Supported REST HTTP Methods

`GET`, `PATCH`

Fields

| Field | Details |
|----------------------------|--|
| <code>DeveloperName</code> | Type string Properties Filter, Group, Sort Description The unique name of the path guidance information. |
| <code>Info</code> | Type string Properties Filter, Nillable, Sort Description The text of the guidance displayed to the user in the user interface. |
| <code>IsDeleted</code> | Type boolean Properties Sort Description Indicates whether the record has been moved to the Recycle Bin (<code>true</code>) or not (<code>false</code>). |

| Field | Details |
|-------------|---|
| Language | <p>Type string</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The language of the path. Valid values are:</p> <ul style="list-style-type: none"> Chinese (Simplified): zh_CN Chinese (Traditional): zh_TW Danish: da Dutch: nl_NL English: en_US Finnish: fi French: fr German: de Italian: it Japanese: ja Korean: ko Norwegian: no Portuguese (Brazil): pt_BR Russian: ru Spanish: es Spanish (Mexico): es_MX Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: sv Thai: th The Salesforce user interface is fully translated to Thai, but Help is in English. |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Label for this path guidance information record.</p> |

PathAssistantStepItem

Represents layout or guidance details for a step on a Path. Available in Tooling API version 36.0 and later.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|-----------------|--|
| IsDeleted | Type boolean Properties Sort Description Indicates whether the record has been moved to the Recycle Bin (<code>true</code>) or not (<code>false</code>). |
| ItemId | Type ID Properties Filter, Group, Sort Description A foreign key field pointing to the <code>Type</code> field that represents either the layout (if <code>Type</code> is set to <code>Layout</code>) or the <code>PathAssistantStepInfo</code> (if <code>Type</code> is set to <code>Information</code>) of this guidance detail. |
| PathAssistantId | Type ID Properties Filter, Group, Sort Description ID of the <code>PathAssistant</code> related to this step. |
| RecordTypeId | Type ID Properties Filter, Group, Nillable, Sort Description ID of the record type associated with this path. |
| Type | Type string |

| Field | Details |
|-------|---|
| | Properties Filter, Group, Sort |
| | Description The type of data that <code>ItemId</code> refers to. Valid values are: <ul style="list-style-type: none"> Information Layout |

PaymentGatewayProvider

Represents the payment gateway provider processing payments. This object is available in API version 48.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

To access Salesforce Payments objects with the API, your org must have one or more of these licenses: Salesforce Payments, Salesforce Order Management, B2B Commerce, or D2C Commerce. Salesforce Payments objects are available only in Lightning Experience.

Fields

| Field | Details |
|----------------------------|--|
| <code>ApexAdapterId</code> | Type reference |
| | Properties Filter, Group, Nillable, Sort |
| | Description The Apex adapter reference for your payment gateway. This field is unique within your organization. This field is a relationship field. This field is a relationship field. |

| Field | Details |
|----------------------|--|
| | <p>Relationship Name ApexAdapter</p> <p>Relationship Type Lookup</p> <p>Refers To ApexClass</p> |
| Comments | <p>Type textarea</p> <p>Properties Filter, Nillable, Sort</p> <p>Description Additional details about the payment gateway provider . Max length is 1000 characters.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> |
| Fullname | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated <insert_type_name> in Metadata API. The full name can include a namespaceprefix. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IdempotencySupported | <p>Type picklist</p> |

| Field | Details |
|----------------|---|
| | <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates whether idempotency can be used.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> No Yes <p>The default value is No.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the PaymentGatewayProvider.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> da—Danish de—German en_US—English es—Spanish es_MX—Spanish (Mexico) fi—Finnish fr—French it—Italian ja—Japanese ko—Korean nl_NL—Dutch no—Norwegian pt_BR—Portuguese (Brazil) ru—Russian sv—Swedish th—Thai zh_CN—Chinese (Simplified) zh_TW—Chinese (Traditional) |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort</p> |

| Field | Details |
|-----------------|--|
| | <p>Description</p> <p>The timestamp when the current user last viewed this record or list view. A null value may mean that the user only accessed this record or list view (LastReferencedDate) but did not view it.</p> |
| ManageableState | <p>Type</p> <p>ManageableState enumerated list</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, idLookup, Sort</p> <p>Description</p> <p>Label for the PaymentGatewayProvider. In the UI, this field is Payment Gateway Provider.</p> |
| Metadata | <p>Type</p> <p>PaymentGatewayProvider</p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>The PaymentGatewayProvider's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> |

| Field | Details |
|-------|---|
| | <p>Description</p> <p>The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |

PermissionDependency

Represents permission dependencies for a specified permission. For example, return all child dependencies for the Modify All Data permission. Available in Tooling API version 46.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

`Query`, `GET`

Special Access Rules

As of Summer '20 and later, only users with View Setup and Configuration permission can access this object.

Fields

| Field Name | Details |
|-------------------------|---|
| <code>Permission</code> | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter</p> |

| Field Name | Details |
|------------------------|---|
| | Description The permission that depends on other permissions to be enabled. For example, the permission might be Modify All Data, which requires View All Data and other permissions to be enabled. |
| PermissionType | Type string Properties Filter Description The permission type. For example, user permissions, such as View All Data, or object permissions. |
| RequiredPermission | Type string Properties Filter Description The permission that is required to be enabled for the dependent permission to be enabled. |
| RequiredPermissionType | Type string Properties Filter Description The permission type. For example, user permissions, such as View All Data, or object permissions. |

Usage

Use the PermissionDependency object to find the permissions on which a specified permission is dependent.

PermissionSet

Represents a set of permissions that's used to grant more access to users without changing their profile or reassigning profiles. Available in API version 28.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`, `retrieve()`, `search()`

Special Access Rules

As of Summer '20 and later, only users who have one of these permissions can access this object:

- View Setup and Configuration
- Manage Session Permission Set Activations
- Assign Permission Sets
- Manage Profiles and Permission Sets

To view the following settings, assignments, and permissions for standard and custom objects in a specified permission set, the View Setup and Configuration permission is required.

- Client settings
- Field permissions
- Layout assignments
- Object permissions
- Permission dependencies
- Permission set tab settings
- Permission set group components
- Record types

Fields

| Field Name | Details |
|-----------------------|--|
| Description | <p>Type string</p> <p>Properties Filter, Nillable, Group, Sort</p> <p>Description A description of the permission set. Limit: 255 characters.</p> |
| HasActivationRequired | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the permission set requires an associated active session (<code>true</code>) or not (<code>false</code>).</p> |
| IsCustom | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> |

| Field Name | Details |
|------------------|--|
| | <p>Description</p> <p>If <code>true</code>, the permission set is custom (created by an admin); if <code>false</code>, the permission set is standard and related to a specific permission set license.</p> |
| IsOwnedByProfile | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>If <code>true</code>, the permission set is owned by a profile. Available in API version 25.0 and later.</p> |
| Label | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>The permission set label, which corresponds to Label in the user interface. Limit: 80 characters.</p> |
| ManageableState | <p>Type</p> <p>ManageableState enumerated list</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Name | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>The permission set group name.</p> |

| Field Name | Details |
|----------------------|--|
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the namespacePrefix__componentName notation. This field is available in API version 30.0 and later.</p> <p>The namespace prefix can have one of the following values:</p> <p>In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer.</p> <p>In organizations that are not Developer Edition organizations, NamespacePrefix is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects.</p> |
| PermissionSetGroupId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description If the permission set is owned by a permission set group, this field returns the ID of the permission set group. If the permission set isn't owned by a permission set group, this field returns a null value. Available in API version 45.0 and later.</p> |
| ProfileId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description If the permission set is owned by a profile, this field returns the ID of the profile. If the permission set isn't owned by a profile, this field returns a null value.</p> |
| Type | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> |

| Field Name | Details |
|------------|--|
| | Description The permission set type. |

PermissionSetGroup

Represents a group of permission sets and the permissions within them. Use permission set groups to organize permissions based on job functions or tasks. Then, you can package the groups as needed. Available in Tooling API version 45.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

Query, GET, POST, PATCH, DELETE


Special Access Rules

As of Summer '20 and later, only users who have one of these permissions can access this object:

- View Setup and Configuration
- Manage Session Permission Set Activations
- Assign Permission Sets

Fields

| Field Name | Details |
|---------------|--|
| Description | Type textarea Properties Create, Filter, Group, Nillable, Sort, Query, Retrieve Update Description The permission set group description. |
| DeveloperName | Type string Properties Create, Filter, Group, NameField, Sort, Update Description The permission set group name used in the API. |

| Field Name | Details |
|-----------------------|---|
| |  Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field. |
| HasActivationRequired | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether the permission set group requires an associated active session (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>. This field is available in API version 53.0 and later.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The Permission Set Group language. Valid values are:</p> <ul style="list-style-type: none"> Chinese (Simplified): <code>zh_CN</code> Chinese (Traditional): <code>zh_TW</code> Danish: <code>da</code> Dutch: <code>nl_NL</code> English: <code>en_US</code> Finnish: <code>fi</code> French: <code>fr</code> German: <code>de</code> Italian: <code>it</code> Japanese: <code>ja</code> Korean: <code>ko</code> Norwegian: <code>no</code> Portuguese (Brazil): <code>pt_BR</code> Russian: <code>ru</code> Spanish: <code>es</code> Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: <code>sv</code> Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |
| ManageableState | <p>Type ManageableState enumerated list</p> |

| Field Name | Details |
|-----------------|---|
| | <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The permission set group label for the aggregated permissions.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The permission set group namespace prefix.</p> |
| Status | <p>Type string</p> <p>Properties DefaultedOnCreate, Filter, Group, Restricted picklist, Sort</p> <p>Description Indicates the permission set group recalculation status.</p> <ul style="list-style-type: none"> • Updated. The group is current. • Outdated. The group requires recalculation. • Updating. The group is in recalculation mode. • Failed. The group recalculation failed. |

Usage

Use the PermissionSetGroup object to query existing permission set groups and to find which aggregated permissions are included in the group.

PermissionSetGroupComponent

A junction object that relates the PermissionSetGroup and PermissionSet objects via their respective IDs; enables permission set group recalculation to determine the aggregated permissions for the group. Available in Tooling API version 45.0 and later.

Supported Calls

`create()`, `delete()`, `describeObject()`, `query()`, `retrieve()`

Supported REST HTTP Methods

Query, GET, POST, PATCH, DELETE

Special Access Rules

As of Spring '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

| Field Name | Details |
|----------------------|---|
| PermissionSet | Type sObject Properties Create, Filter, Group, Sort Description The permission set containing the permission set component. |
| PermissionSetGroup | Type PermissionSetGroup Properties Create, Filter, Group, Sort Description The name of the permission set group. |
| PermissionSetGroupId | Type ID Properties Create, Filter, Group, Sort |

| Field Name | Details |
|-----------------|--|
| | Description The ID of the permission set group containing the permission set component. |
| PermissionSetId | Type ID Properties Create, Filter, Group, Sort Description The ID of the permission set. |

Usage

Use the PermissionSetGroupComponent object to add members to or delete members from a permission set group, or to query for group members.

PermissionSetTabSetting

Represents a tab's settings for a profile or permission set. Use PermissionSetTabSetting for manipulating tab visibility on profiles and permission sets. Available in Tooling API version 37.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Supported REST HTTP Methods


Query, GET, POST, PATCH, DELETE

Special Access Rules

As of Spring '20 and later, only users with View Setup and Configuration permission can access this object.

Fields

| Field Name | Details |
|------------|---|
| Name | Type string Properties Create, Filter, Group |

| Field Name | Details |
|------------|---|
| | <p>Description</p> <p>The tab's API name. For standard tabs, the name is in the form "standard-Account". For custom tabs, it's the developer name.</p> |
| ParentId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group</p> <p>Description</p> <p>The ID of the permission set to which this tab setting belongs. For profile tab settings, <code>ParentId</code> is the ID of the permission set owned by the profile.</p> |
| Visibility | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Filter, Group, Restricted picklist</p> <p>Description</p> <p>The default visibility setting for this tab. Valid values are:</p> <ul style="list-style-type: none"> • Default Off • Default On <p> Note: There's no <i>hidden</i> value. Instead, a hidden tab is indicated by having no <code>PermissionSetTabSetting</code> row in the database.</p> |

Usage

To hide a tab, delete the associated `PermissionSetTabSetting` object. `ParentId` and `Name` fields can't be updated.

This example creates a tab setting to make the custom object tab named `CustomObject__c` visible for the System Administrator profile.

```
try {
    // Query for the ID of the permission set owned by the System Administrator profile
    String queryString = "SELECT Id FROM PermissionSet
        + WHERE Profile.Name = 'System Administrator'";
    QueryResult queryResult = connection.query(queryString);
    if (queryResult.getSize() > 0) {
        // Construct the tab setting sObject
        PermissionSetTabSetting tabSetting = new PermissionSetTabSetting();
        tabSetting.setParentId(queryResult.getRecords()[0].getId());
        tabSetting.setName("CustomObject__c");
        tabSetting.setVisibility(TabVisibility.DefaultOn);
        SObject[] sObjects = new SObject[] { tabSetting };
        // Create the tab setting
        SaveResult[] saveResults = connection.create(sObjects);
        for (SaveResult saveResult : saveResults) {
```

```

        if (saveResult.isSuccess()) {
            System.out.println("Successfully created the tab setting.");
            System.out.println("ID: " + saveResult.getId());
        } else {
            Error error = saveResult.getErrors()[0];
            System.out.println("Failed to create the tab setting.");
            System.out.println("Status code: " + error.getStatusCode());
            System.out.println("Message: " + error.getMessage());
        }
    }
} else {
    System.out.println("Failed to find the ID of the permission set.");
}
} catch (ConnectionException ce) {
    ce.printStackTrace();
}
}

```

This example updates the existing tab setting to make the Account tab available instead of visible for the Standard User profile.

```

try {
    // Query for the ID of the tab setting for the Account tab on the Standard User profile

    String queryString = "SELECT Id FROM PermissionSetTabSetting "
        + "WHERE Parent.Profile.Name = 'Standard User' AND Name = 'standard-Account'";
    QueryResult queryResult = connection.query(queryString);
    if (queryResult.getSize() > 0) {
        // Change the visibility
        PermissionSetTabSetting tabSetting =
            (PermissionSetTabSetting) queryResult.getRecords()[0];
        tabSetting.setVisibility(TabVisibility.DefaultOff);
        // Update the tab setting
        SObject[] sObjects = new SObject[] { tabSetting };
        SaveResult[] saveResults = connection.update(sObjects);
        for (SaveResult saveResult : saveResults) {
            if (saveResult.isSuccess()) {
                System.out.println("Successfully updated the tab setting.");
                System.out.println("ID: " + saveResult.getId());
            } else {
                Error error = saveResult.getErrors()[0];
                System.out.println("Failed to update the tab setting.");
                System.out.println("Status code: " + error.getStatusCode());
                System.out.println("Message: " + error.getMessage());
            }
        }
    }
} else {
    System.out.println("Failed to find the ID of the tab setting.");
}
} catch (ConnectionException ce) {
    ce.printStackTrace();
}
}

```

The example deletes the existing tab setting to make the Account tab hidden for the Standard User profile.

```

try {
    // Query for the ID of the tab setting for the Account tab on the Standard User profile

```



```
String queryString = "SELECT Id FROM PermissionSetTabSetting "
    + "WHERE Parent.Profile.Name = 'Standard User' AND Name = 'standard-Account'";
QueryResult queryResult = connection.query(queryString);
if (queryResult.getSize() > 0) {
    // Delete the tab setting
    String[] ids = new String[] { queryResult.getRecords()[0].getId() };
    DeleteResult[] deleteResults = connection.delete(ids);
    for (DeleteResult deleteResult : deleteResults) {
        if (deleteResult.isSuccess()) {
            System.out.println("Successfully deleted the tab setting.");
            System.out.println("ID: " + deleteResult.getId());
        } else {
            Error error = deleteResult.getErrors()[0];
            System.out.println("Failed to delete the tab setting.");
            System.out.println("Status code: " + error.getStatusCode());
            System.out.println("Message: " + error.getMessage());
        }
    }
} else {
    System.out.println("Failed to find the ID of the tab setting.");
}
} catch (ConnectionException ce) {
    ce.printStackTrace();
}
```

PipelineInspMetricConfig

Represents the configuration of a forecast category metric that appears in the Pipeline Inspection view. This object is available in API version 55.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Fields

| Field | Details |
|---------------|----------------|
| DeveloperName | Type string |

| Field | Details |
|--------------|---|
| | <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Read only. The unique name of Pipeline Inspection metric configuration in the API.</p> |
| IsCumulative | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Read only. Whether the metric is cumulative.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Read only. The language of the Pipeline Inspection metric.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Customized label of the Pipeline Inspection metric. Limit: 50 characters.</p> |
| Metric | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> <p>Description The Pipeline Inspection metric. Possible values are:</p> <ul style="list-style-type: none"> • BestCase • ClosedLost • ClosedWon • Commit • MostLikely • OpenPipeline • TotalPipeline |

PlatformEventChannel

Represents a custom channel that you can subscribe to in order to receive a stream of change data capture events. In API version 54.0 and later, PlatformEventChannel can contain a stream of platform events with Platform Event Stream Filtering Beta.

This object is available in API version 47.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods


DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules

- To retrieve or query this object, you must have the View Setup and Configuration permission.
- To create, update, or delete this object, you must have the Customize Application permission.

Fields

| Field Name | Description |
|---------------|---|
| ChannelType | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>Required. The channel type. Valid values are:</p> <ul style="list-style-type: none">• <code>data</code>—Change Data Capture channel corresponding to the selected entities.• <code>event</code>—A channel that contains custom platform events. |
| DeveloperName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>The unique name for the PlatformEventChannel object. The developer name doesn't include the <code>__chn</code> custom channel suffix. For example, the developer name of the <code>MyChannel1__chn</code> custom channel is <code>MyChannel1</code>.</p> <p>This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is</p> |

| Field Name | Description |
|-----------------|---|
| | <p>automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note:</p> <ul style="list-style-type: none"> When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance slows down while Salesforce generates one for each record. Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field. |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated PlatformEventChannel in Metadata API. The full name can include a namespace prefix. The full name includes the <code>__chn</code> custom channel suffix. For example, the full name of the MyChannel custom channel is <code>MyChannel__chn</code>.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the <code>MasterLabel</code>.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> <code>beta</code> <code>deleted</code> <code>deprecated</code> <code>deprecatedEditable</code> |

| Field Name | Description |
|-----------------|---|
| | <ul style="list-style-type: none"> installed installedEditable released unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The channel label. The label of this field is <code>Label</code>.</p> |
| Metadata | <p>Type complexvalue</p> <p>Properties Create, Nillable, Update</p> <p>Description Platform event channel metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |

Usage

This JSON example is the body of a REST API POST request that creates the `SalesEvents__chn` custom channel. The corresponding REST endpoint is `/services/data/v59.0/tooling/objects/PlatformEventChannel`.

```
{
  "FullName": "SalesEvents__chn",
  "Metadata": {
    "channelType": "data",
    "label": "My Custom Channel"
  }
}
```

Note:

- You can update only the `FullName` field and the metadata `label` field of a `PlatformEventChannel`.
- If you delete a `PlatformEventChannel`, all its member `PlatformEventChannelMember` components are also deleted.

You can query custom channels in SOQL over Tooling API but not the standard channel (`ChangeEvent`s). For example, this query returns fields of channel members from all custom channels.

```
SELECT Id, DeveloperName, ChannelType, MasterLabel FROM PlatformEventChannel
```

SEE ALSO:

[Change Data Capture Developer Guide](#)

[Platform Events Developer Guide: Filter Your Stream of Platform Events with Channels \(Beta\)](#)

[PlatformEventChannelMember](#)

PlatformEventChannelMember

Represents an entity selected for Change Data Capture notifications on a standard or custom channel, or a platform event selected on a custom channel.

This object is available in API version 47.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`


Supported REST HTTP Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

- To retrieve or query this object, you must have the View Setup and Configuration permission.
- To create, update, or delete this object, you must have the Customize Application permission.
- The `EventChannel` and `SelectedEntity` fields can't be updated.

Fields

| Field Name | Description |
|------------------|--|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name for the PlatformEventChannelMember object.</p> <p>This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p>The developer name is in the format ChannelName_EventName. If your channel member name contains a custom channel name to make it unique, ensure to replace the double underscores in the name with one underscore. For example, the developer name of a member of the <code>MyChannel__chn</code> custom channel is <code>MyChannel__chn_AccountChangeEvent</code>. And the developer name of a member of the default standard channel is <code>ChangeEvents_AccountChangeEvent</code>.</p> <p> Note:</p> <ul style="list-style-type: none"> When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance slows down while Salesforce generates one for each record. Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field. |
| EventChannel | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The name of a channel. For the standard channel, the name is <code>ChangeEvents</code>. For a custom channel, the name is in this format: MyChannel__chn.</p> |
| FilterExpression | <p>Type textarea</p> <p>Properties Nillable</p> |

| Field Name | Description |
|-----------------|--|
| | <p>Description</p> <p>An expression that is used to filter the stream of events and deliver only the events that match specific criteria. The filter expression can contain one or more field-value expressions. The filter expression format is based on SOQL and supports a subset of SOQL operators and field types.</p> <p>For example, this filter expression delivers only events that contain the City__c field with a value of 'San Francisco'. <code>City__c = 'San Francisco'</code></p> <p>For more information, see Filter Your Stream of Platform Events with Channels in the <i>Platform Events Developer Guide</i> and Filter Your Stream of Change Events with Channels in the <i>Change Data Capture Developer Guide</i>. Available in API version 56.0 and later.</p> |
| FullName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Group, Nillable</p> <p>Description</p> <p>The full name of the associated PlatformEventChannelMember object in Metadata API. The full name is in the format <i>ChannelName_EventName</i> and can include a namespace prefix.</p> <p>Two consecutive underscores in full names designate either a component name suffix or a namespace prefix. In all other cases, two consecutive underscores aren't supported in full names. If your channel member name contains a custom channel name to make it unique, be sure to replace the double underscores in the name with one underscore. For example, the member name would be <code>MyChannel_chn_AccountChangeEvent</code> and not <code>MyChannel__chn_AccountChangeEvent</code>.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>The language of the <code>MasterLabel</code>.</p> |
| ManageableState | <p>Type</p> <p>ManageableState enumerated list</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> |

| Field Name | Description |
|-----------------|---|
| | <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> • <code>installedEditable</code> • <code>released</code> • <code>unmanaged</code> |
| Metadata | <p>Type</p> <p>complexvalue</p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>Platform event channel member metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that aren't Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |

| Field Name | Description |
|----------------|---|
| SelectedEntity | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The change event name of an entity selected for Change Data Capture notifications. For example, for the Account standard object, the name is <code>AccountChangeEvent</code>, or for a custom object <code>MyObject__c</code>, the name is <code>MyObject__ChangeEvent</code>.</p> |

Usage

This JSON example is the body of a REST API POST request. It adds a member to a custom channel named `SalesEvents__chn`. The corresponding REST endpoint is `/services/data/v59.0/tooling/objects/PlatformEventChannelMember`.

```
{
  "FullName": "SalesEvents_chn_AccountChangeEvent",
  "Metadata": {
    "eventChannel": "SalesEvents__chn",
    "selectedEntity": "AccountChangeEvent"
  }
}
```

To add a member to the ChangeEvents default channel, the request body looks as follows.

```
{
  "FullName": "ChangeEvents_AccountChangeEvent",
  "Metadata": {
    "eventChannel": "ChangeEvents",
    "selectedEntity": "AccountChangeEvent"
  }
}
```

You can query `PlatformEventChannelMember` in SOQL over Tooling API. For example, this query returns fields of all channel members on all channels.

```
SELECT Id, DeveloperName, EventChannel, SelectedEntity FROM PlatformEventChannelMember
```



Note: For custom channels, the EventChannel value that the query returns is the channel ID, which starts with the `0YL` prefix.

You can configure a channel member to include extra fields in change events as part of Change Data Capture Enrichment. For more information, see [Example: Add Event Enrichment Fields with Tooling API](#) in the *Change Data Capture Developer Guide*.

SEE ALSO:

- [Change Data Capture Developer Guide: Subscription Channels](#)
- [Change Data Capture Developer Guide: Compose Streams of Change Data Capture Notifications with Custom Channels](#)
- [Change Data Capture Developer Guide: Example Diagrams for Channels and Channel Members](#)
- [Platform Events Developer Guide: Filter Your Stream of Platform Events with Channels \(Beta\)](#)
- [PlatformEventChannel](#)

PlatformEventSubscriberConfig

Represents configuration settings for a platform event Apex trigger, including the batch size and the trigger’s running user. This object is available in API version 51.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Fields

| Field | Details |
|---------------|--|
| BatchSize | <p>Type</p> <p>int</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>A custom batch size, from 1 through 2,000, for the platform event Apex trigger. The batch size corresponds to the maximum number of event messages that can be sent to a trigger in one execution. The default batch size is 2,000 for platform event triggers.</p> <p>We don't recommend setting the batch size to 1 to process one event at a time. Small batch sizes can slow down the processing of event messages.</p> |
| DeveloperName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Update</p> |

Field

Details

Description

The unique name for the PlatformEventSubscriberConfig object.

This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API.



Note: When creating large sets of data, always specify a unique `DeveloperName` for each record. If no `DeveloperName` is specified, performance can slow down while Salesforce generates one for each record.



Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.

Language

Type

picklist

Properties

Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update

Description

The language of PlatformEventSubscriberConfig.

Possible values are:

- `da`—Danish
- `de`—German
- `en_US`—English
- `es`—Spanish
- `es_MX`—Spanish (Mexico)
- `fi`—Finnish
- `fr`—French
- `it`—Italian
- `ja`—Japanese
- `ko`—Korean
- `nl_NL`—Dutch
- `no`—Norwegian
- `pt_BR`—Portuguese (Brazil)
- `ru`—Russian
- `sv`—Swedish
- `th`—Thai
- `zh_CN`—Chinese (Simplified)
- `zh_TW`—Chinese (Traditional)

| Field | Details |
|-----------------|---|
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Label for PlatformEventSubscriberConfig. In the UI, this field is Platform Event Subscriber Configuration.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. |

| Field | Details |
|-------------------------|--|
| PlatformEventConsumerId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The ID of the platform event Apex trigger to configure. This field is unique within your Salesforce org.</p> |
| UserId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The ID of the user that the platform event Apex trigger runs as. By default, the platform event trigger runs as the Automated Process entity. Setting the running user to a specific user has these benefits:</p> <ul style="list-style-type: none"> • Records are created or modified as this user. • Records with <code>OwnerId</code> fields have their <code>OwnerId</code> fields populated to this user when created or modified. • Debug logs for the trigger execution are created by this user. • You can send email from the trigger, which isn't supported with the default Automated Process user. |

Usage

To add a configuration, perform a POST request to this endpoint.

```
/services/data/v59.0/tooling/objects/PlatformEventSubscriberConfig
```

Provide the values in the request body. This example request configures an existing trigger with the batch size of 200 and specifies the ID of a running user.

```
{
  "BatchSize": "200",
  "DeveloperName": "OrderEventTriggerConfig",
  "MasterLabel": "OrderEventTriggerConfig",
  "PlatformEventConsumerId": "01qRM0000004PEhYAM",
  "UserId": "005RM00000231cZYAQ"
}
```

To get a specific configuration by ID, perform a GET request to this endpoint with the ID of your PlatformEventSubscriberConfig record appended.

```
/services/data/v59.0/tooling/objects/PlatformEventSubscriberConfig/<ID>
```

Also, you can query retrieve the configurations in your org with SOQL. If querying from the Developer Console Query Editor, ensure you select **Use Tooling API**. This example query retrieves all configurations set up in your Salesforce org.

```
SELECT Id, DeveloperName, BatchSize, PlatformEventConsumerId, UserId FROM
PlatformEventSubscriberConfig
```

PostTemplate

Represents an approval post template for Approvals in Chatter.

This object is available in API version 35.0 and later.

Supported SOAP Calls

`query()`, `retrieve()`, `search()`, `update()`

Supported REST HTTP Methods

GET, PATCH

Fields

| Field | Details |
|--------------------|---|
| Description | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description A description of the feed post template, limited to 255 characters.</p> |
| EntityDefinition | <p>Type EntityDefinition</p> <p>Properties Filter, Group, Sort</p> <p>Description A relationship lookup to the object type associated with this PostTemplate. You can't interact directly with this field. Instead, use it in queries.</p> |
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Sort</p> |

| Field | Details |
|-------|---|
| | Description The durable ID for the object defined in the <code>EntityDefinition</code> field. |
| Name | Type string Properties Create, Filter, Group, idLookup, Sort, Update Description The template name. |

ProcessFlowMigration

Represents a process's migrated criteria and the resulting migrated flow. This object is available in API version 58.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST API Methods

GET, HEAD, Query

Fields

| Field | Details |
|-----------------------------|--|
| DestinationFlowDefinitionId | Type reference Properties Filter, Group, Sort Description The ID of the resulting migrated flow. This field is a relationship field. Relationship Name DestinationFlowDefinition Relationship Type Lookup |

| Field | Details |
|--------------------------|---|
| | Refers To FlowDefinition |
| DestinationFlowVersionId | Type reference Properties Filter, Group, Nillable, Sort Description The version ID of the migrated flow. This field is a relationship field. Relationship Name DestinationFlowVersion Relationship Type Lookup Refers To Flow |
| DeveloperName | Type string Properties Filter, Group, Sort Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. |
| Language | Type picklist Properties Filter, Group, Restricted picklist, Sort Description Language of the MasterLabel. Possible values are: <ul style="list-style-type: none"> af—Afrikaans am—Amharic ar—Arabic ar_AE—Arabic (United Arab Emirates) ar_BH—Arabic (Bahrain) ar_DZ—Arabic (Algeria) ar_EG—Arabic (Egypt) |

| Field | Details |
|-------|--|
| | <ul style="list-style-type: none"> • <code>ar_IQ</code>—Arabic (Iraq) • <code>ar_JO</code>—Arabic (Jordan) • <code>ar_KW</code>—Arabic (Kuwait) • <code>ar_LB</code>—Arabic (Lebanon) • <code>ar_LY</code>—Arabic (Libya) • <code>ar_MA</code>—Arabic (Morocco) • <code>ar_OM</code>—Arabic (Oman) • <code>ar_QA</code>—Arabic (Qatar) • <code>ar_SA</code>—Arabic (Saudi Arabia) • <code>ar_SD</code>—Arabic (Sudan) • <code>ar_SY</code>—Arabic (Syria) • <code>ar_TN</code>—Arabic (Tunisia) • <code>ar_YE</code>—Arabic (Yemen) • <code>bg</code>—Bulgarian • <code>bn</code>—Bengali • <code>bs</code>—Bosnian • <code>ca</code>—Catalan • <code>cs</code>—Czech • <code>cy</code>—Welsh • <code>da</code>—Danish • <code>de</code>—German • <code>de_AT</code>—German (Austria) • <code>de_BE</code>—German (Belgium) • <code>de_CH</code>—German (Switzerland) • <code>de_LU</code>—German (Luxembourg) • <code>el</code>—Greek • <code>el_CY</code>—Greek (Cyprus) • <code>en_AE</code>—English (United Arab Emirates) • <code>en_AU</code>—English (Australian) • <code>en_BE</code>—English (Belgium) • <code>en_CA</code>—English (Canadian) • <code>en_CY</code>—English (Cyprus) • <code>en_DE</code>—English (Germany) • <code>en_GB</code>—English (UK) • <code>en_HK</code>—English (Hong Kong) • <code>en_IE</code>—English (Ireland) • <code>en_IL</code>—English (Israel) • <code>en_IN</code>—English (Indian) |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> • en_MT—English (Malta) • en_MY—English (Malaysian) • en_NL—English (Netherlands) • en_NZ—English (New Zealand) • en_PH—English (Phillipines) • en_SG—English (Singapore) • en_US—English • en_ZA—English (South Africa) • es—Spanish • es_AR—Spanish (Argentina) • es_BO—Spanish (Bolivia) • es_CL—Spanish (Chile) • es_CO—Spanish (Colombia) • es_CR—Spanish (Costa Rica) • es_DO—Spanish (Dominican Republic) • es_EC—Spanish (Ecuador) • es_GT—Spanish (Guatemala) • es_HN—Spanish (Honduras) • es_MX—Spanish (Mexico) • es_NI—Spanish (Nicaragua) • es_PA—Spanish (Panama) • es_PE—Spanish (Peru) • es_PR—Spanish (Puerto Rico) • es_PY—Spanish (Paraguay) • es_SV—Spanish (El Salvador) • es_US—Spanish (United States) • es_UY—Spanish (Uruguay) • es_VE—Spanish (Venezuela) • et—Estonian • eu—Basque • fa—Farsi • fi—Finnish • fr—French • fr_BE—French (Belgium) • fr_CA—French (Canadian) • fr_CH—French (Switzerland) • fr_LU—French (Luxembourg) • fr_MA—French (Morocco) |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> • <code>ga</code>—Irish • <code>gu</code>—Gujarati • <code>haw</code>—Hawaiian • <code>hi</code>—Hindi • <code>hmn</code>—Hmong • <code>hr</code>—Croatian • <code>ht</code>—Haitian Creole • <code>hu</code>—Hungarian • <code>hy</code>—Armenian • <code>in</code>—Indonesian • <code>is</code>—Icelandic • <code>it</code>—Italian • <code>it_CH</code>—Italian (Switzerland) • <code>iw</code>—Hebrew • <code>ja</code>—Japanese • <code>ji</code>—Yiddish • <code>ka</code>—Georgian • <code>kk</code>—Kazakh • <code>kl</code>—Greenlandic • <code>km</code>—Khmer • <code>kn</code>—Kannada • <code>ko</code>—Korean • <code>lb</code>—Luxembourgish • <code>lt</code>—Lithuanian • <code>lv</code>—Latvian • <code>mi</code>—Te reo • <code>mk</code>—Macedonian • <code>ml</code>—Malayalam • <code>mr</code>—Marathi • <code>ms</code>—Malay • <code>mt</code>—Maltese • <code>my</code>—Burmese • <code>n1_BE</code>—Dutch (Belgium) • <code>n1_NL</code>—Dutch • <code>no</code>—Norwegian • <code>pa</code>—Punjabi • <code>pl</code>—Polish • <code>pt_BR</code>—Portuguese (Brazil) |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> • <code>pt_PT</code>—Portuguese (European) • <code>rm</code>—Romansh • <code>ro</code>—Romanian • <code>ro_MD</code>—Romanian (Moldova) • <code>ru</code>—Russian • <code>ru_AM</code>—Russian (Armenia) • <code>ru_BY</code>—Russian (Belarus) • <code>ru_KG</code>—Russian (Kyrgyzstan) • <code>ru_KZ</code>—Russian (Kazakhstan) • <code>ru_LT</code>—Russian (Lithuania) • <code>ru_MD</code>—Russian (Moldova) • <code>ru_PL</code>—Russian (Poland) • <code>ru_UA</code>—Russian (Ukraine) • <code>sh</code>—Serbian (Latin) • <code>sh_ME</code>—Montenegrin • <code>sk</code>—Slovak • <code>sl</code>—Slovene • <code>sm</code>—Samoan • <code>sq</code>—Albanian • <code>sr</code>—Serbian (Cyrillic) • <code>sv</code>—Swedish • <code>sw</code>—Swahili • <code>ta</code>—Tamil • <code>te</code>—Telugu • <code>th</code>—Thai • <code>tl</code>—Tagalog • <code>tr</code>—Turkish • <code>uk</code>—Ukrainian • <code>ur</code>—Urdu • <code>vi</code>—Vietnamese • <code>xh</code>—Xhosa • <code>zh_CN</code>—Chinese (Simplified) • <code>zh_HK</code>—Chinese (Hong Kong) • <code>zh_MY</code>—Chinese (Malaysia) • <code>zh_SG</code>—Chinese (Singapore) • <code>zh_TW</code>—Chinese (Traditional) • <code>zu</code>—Zulu |

| Field | Details |
|-----------------------|--|
| ManageableState | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package. Possible values are:</p> <ul style="list-style-type: none">• beta• deleted• deprecated• deprecatedEditable• installed• installedEditable• released• unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The label for the ProcessFlowMigration.</p> |
| MigratedCriteriaLabel | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The label of the criteria that was migrated.</p> |
| MigratedCriteriaName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of the criteria that was migrated.</p> |
| NamespacePrefix | <p>Type string</p> |

| Field | Details |
|------------------|---|
| | Properties Filter, Group, Nillable, Sort Description The namespace of the package containing the process flow migration object. |
| ProcessVersionId | Type reference Properties Filter, Group, Sort Description The version ID of the originating process. This field is a relationship field. Relationship Name ProcessVersion Relationship Type Lookup Refers To Flow |

Profile

Represents a user profile. A profile defines a user's permission to perform different functions within Salesforce. This type extends the Metadata metadata type and inherits its `fullName` field.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`

Supported REST HTTP Methods

GET, HEAD

Special Access Rules


As of Summer '20 and later, Customer Portal and Partner Portal users *cannot* access this object.

To view the following settings, assignments, and permissions for standard and custom objects in a specified profile, the View Setup and Configuration permission is required.

- Client settings
- Field permissions

- Layout assignments
- Object permissions
- Permission dependencies
- Permission set tab settings
- Permission set group components
- Record types

As of API version 50.0 and later, only users with correct permissions can view profile names other than their own if the Profile Filtering setting is enabled.

 **Important:** Profile names are also exposed when users with permissions to perform the following tasks take these actions:

- Create a tab or record type with a wizard step that includes the assignment of tabs and record types to profiles.
- Configure a login flow where viewing profile lists is required to make flow associations.
- Set up delegated admins where looking up profiles is needed to identify assignable profiles.
- Administer an org as a delegated customer admin.
- Administer an org as a delegated admin to view and assign profiles of the delegated group.

Fields

| Field | Details |
|-------------|--|
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The profile description, limited to 255 characters.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The unique profile name. Use this name when creating the profile, before you have an ID. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Metadata | <p>Type ProfileMetadata</p> |

| Field | Details |
|------------------------------|--|
| | <p>Properties Create, Nillable, Update</p> <p>Description The profile metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> <p>Description The profile name.</p> |
| TimeSheetTemplateAssignments | <p>Type tns:QueryResult</p> <p>Properties Nillable</p> <p>Description The time sheet template that you assign to a particular profile. Because this field represents a relationship, use it only in subqueries. This field is available in Tooling API version 46.0 and later.</p> |

ProfileLayout

Represents a profile layout.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`query()`, `retrieve()`

Supported REST HTTP Methods

GET

Special Access Rules

As of Summer '20 and later, only users with the View Setup and Configuration permission can access this object.

Fields

| Field | Details |
|---------------|---|
| LayoutId | Type ID Properties Filter, Group, Sort Description The unique identifier for this layout. |
| ProfileId | Type ID Properties Filter, Group, Sort Description The unique identifier for this profile. |
| RecordTypeId | Type ID Properties Filter, Group, Sort Description The unique identifier for the record. |
| TableEnumOrId | Type string Properties Filter, Group, Restricted picklist, Sort Description The enum (for example, Account) or ID of the object this field is on. |

Publisher

Represents the publisher of objects and fields. For example, Salesforce is the publisher for standard objects, the organization is the publisher for custom objects, and the package is the publisher for installed packages. Available in Tooling API version 34.0 and later.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36


Special Access Rules

As of Spring '20 and later, only authenticated internal and external users can access this object.

Fields

| Field | Details |
|--------------|---|
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| IsSalesforce | <p>Type boolean</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Indicates whether Salesforce provided the associated objects or fields (<code>true</code>).</p> |
| MajorVersion | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The first number in a package version number. A complete version number combines the values of the <code>MajorVersion</code> and <code>MinorVersion</code> fields into either an <code>x.y</code> format or an <code>x.y.z</code> format. The <code>x</code> represents the major version, <code>y</code> the minor version, and <code>z</code> the patch version. (The patch version can't be specified; it's automatically assigned when a managed beta package is uploaded.)</p> |

| Field | Details |
|-----------------|---|
| MinorVersion | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The second number in a package version number. A complete version number combines the values of the <code>MajorVersion</code> and <code>MinorVersion</code> fields into either an <code>x.y</code> format or an <code>x.y.z</code> format. The <code>x</code> represents the major version, <code>y</code> the minor version, and <code>z</code> the patch version. (The patch version can't be specified; it's automatically assigned when a managed beta package is uploaded.)</p> <p>If <code>MinorVersion</code> isn't specified, the default value is 1 more than the minor version of the currently released package (0 if not released).</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The presentation-friendly name of the publisher.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix that is associated with this object. Each Developer Edition org that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation.</p> <p>The namespace prefix can have one of the following values.</p> <ul style="list-style-type: none"> • In Developer Edition orgs, <code>NamespacePrefix</code> is set to the namespace prefix of the org for all objects that support it, unless an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition org of the package developer. • In orgs that are not Developer Edition orgs, <code>NamespacePrefix</code> is set only for objects that are part of an installed managed package. All other objects have no namespace prefix. <p><code>NamespacePrefix</code> is null if the publisher is Salesforce.</p> |

 **Note:** Publisher fields are exposed in SOAP API version 46.0 and later. You can use Tooling API to query for Publisher fields in guest user mode in API version 45.0 and earlier. In API version 46.0 and later, use SOAP API to get this data in guest user mode. Publisher is still exposed in Tooling API to User Profiles with the ViewSetup permission.

QueryResult

Represents the results of a query. For example, if you query on the object `EntityDefinition`, all the layouts for that entity are returned as an array of `QueryResult` objects in the `Layouts` field. Available in Tooling API version 34.0 and later.

`QueryResult` is not an extension of `sObject`.

Fields

| Field | Details |
|-----------------------------|--|
| <code>done</code> | <p>Type boolean</p> <p>Description If <code>true</code>, no additional rows can be retrieved from the query result. If <code>false</code>, one or more rows remain to be retrieved. Use this value as a loop condition while iterating through query results.</p> |
| <code>entityTypeName</code> | <p>Type string</p> <p>Description The object or entity type, such as <code>ApexClass</code> or <code>CompactLayoutInfo</code>.</p> |
| <code>nextRecordsUrl</code> | <p>Type string</p> <p>Description If the results exceed the current batch size, this field contains the URL of the next record in the query result set. This field is populated for the REST resource <code>queryAll</code>, and is analogous to <code>queryLocator</code> for SOAP calls.</p> |
| <code>queryLocator</code> | <p>Type <code>QueryLocator</code></p> <p>Description If the results exceed the current batch size, this field contains a unique identifier used to retrieve the next batch of records. This field is populated for SOAP <code>queryMore()</code> and is analogous to the REST resource <code>queryAll</code>. Each new batch returns a new <code>queryLocator</code> value.</p> |
| <code>records</code> | <p>Type <code>sObject</code></p> |

| Field | Details |
|-----------|---|
| | Description Array of sObjects matching the data specified in the query. |
| size | Type int Description Total number of rows returned. If no rows were returned, the value is (0). This field is the same as the <code>size</code> field in <code>QueryResult</code> in the Enterprise and Partner WSDLs. |
| totalSize | Type int Description Total number of rows returned. Indicates whether the query retrieved any rows (any value greater than 0) or not (0). This field is the same as the <code>totalSize</code> field in <code>QueryResult</code> using the REST resource <code>query</code> or <code>queryAll</code> . |

QueryLocator Metadata

| Field | Details |
|--------------|--|
| queryLocator | Type string Description If the results exceed the current batch size, this field contains an identifier. Use with the SOAP <code>queryMore()</code> call to retrieve the next batch of records. Each new batch returns a new <code>queryLocator</code> value. |

QuickActionDefinition

Represents the definition of a quick action.

This object is available in API version 32.0 and later.



Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|--------------------|---|
| ActionSubtype | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The subtype of the action. Valid values are:</p> <ul style="list-style-type: none"> • <code>Action</code> • <code>ScreenAction</code> <p>This field is available in API version 50.0 and later.</p> <p> Note: This field is available only for Lightning web component quick actions.</p> |
| Description | <p>Type textarea</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The description of the action.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the action in the API. This field corresponds to the Name field in the user interface.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the object associated with the quick action.</p> <p>Relationship Name EntityDefinition</p> <p>Relationship Type Lookup</p> |

| Field | Details |
|----------|--|
| | Refers To EntityDefinition |
| FullName | Type string Properties Create, Group, Nillable Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |
| Height | Type int Properties Filter, Group, Nillable, Sort Description The height of the action, in pixels. This field is set only when the quick action has a custom icon. |
| IconId | Type reference Properties Filter, Group, Nillable, Sort Description The ID of the action icon. This field is set only when the quick action has a custom icon. Relationship Name Icon Relationship Type Lookup Refers To StaticResource |
| Label | Type string Properties Filter, Group, Nillable, Sort Description The action label that corresponds to the Label field in the user interface. |

| Field | Details |
|-----------------|--|
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the action. Valid values are:</p> <ul style="list-style-type: none"> Chinese (Simplified): zh_CN Chinese (Traditional): zh_TW Danish: da Dutch: nl_NL English: en_US Finnish: fi French: fr German: de Italian: it Japanese: ja Korean: ko Norwegian: no Portuguese (Brazil): pt_BR Russian: ru Spanish: es Spanish (Mexico): es_MX Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: sv Thai: th The Salesforce user interface is fully translated to Thai, but Help is in English. |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> beta deleted deprecated deprecatedEditable installed installedEditable released |

| Field | Details |
|-----------------------|--|
| | <ul style="list-style-type: none"> unmanaged <p>This field is available in API version 38.0 and later.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The action label.</p> |
| Metadata | <p>Type QuickAction</p> <p>Properties Create, Nillable, Update</p> <p>Description The metadata for the quick action. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the action.</p> |
| OptionsCreateFeedItem | <p>Type boolean</p> <p>Properties Filter,</p> <p>Description Indicates whether successful completion of the action creates a feed item (<code>true</code>) or not (<code>false</code>). Applies only to Create Record, Update Record, and Log a Call quick action types. Available in API version 36.0 and later.</p> |
| SubjectType | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The associated object's API name. For example, <code>FeedItem</code>.</p> |

| Field | Details |
|----------------|--|
| StandardLabel | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The standard label for the action. Valid values are:</p> <ul style="list-style-type: none"> • AddRecord • AddMember • ChangeDueDate • ChangePriority • ChangeStatus • CreateNew • CreateNewRecordType (For example, a label with something like “Create New Idea”) • Defer • EditDescription • EnrollInProgram (Available in API versions 46.0 and later only if the org has Health Cloud enabled) • Escalate • EscalateToRecord • Forward (Available in API version 42.0 and later) • LogACall • LogANote • ModifyAppointment (Available in API version 47.0 and later) • New (A new record) • NewChild (A new child record) • NewChildRecordType • NewRecordType (For example, a label with something like “New Idea”) • OfferFeedback • Quick (A quick record) • QuickRecordType • Reply (Available in API version 42.0 and later) • ReplyAll (Available in API version 42.0 and later) • RequestFeedback • SendEmail (This value is available in API version 31.0 and later.) • Update |
| SuccessMessage | <p>Type string</p> |

| Field | Details |
|--------------------|--|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The message that displays to the user upon successful completion of the action. Available in API version 36.0 and later.</p> |
| TargetField | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The API name of the parent object for the record created by this quick action. For example, <code>CollaborationGroup</code>.</p> |
| TargetRecordTypeId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the target record type.</p> <p>Relationship Name TargetRecordType</p> <p>Relationship Type Lookup</p> <p>Refers To RecordType</p> |
| TargetObjectType | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The API name of the type of object record this action creates. For example, <code>OpportunityLineItem</code>.</p> |
| Type | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The type of action. Valid values are:</p> |

| Field | Details |
|-------|--|
| | <ul style="list-style-type: none"> • Canvas • Create • Flow (This value is available as a Beta in API version 41.0 and later.) • LightningComponent (This value is available in API version 38.0 and later.) • LogACall • Post • SendEmail • SocialPost • Update • VisualforcePage |
| Width | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The width of the action, in pixels. This field is set only when the quick action has a custom icon.</p> |

Usage

A QuickActionDefinition represents information about a quick action. The following example creates a global quick action that lets users quickly create a task.

```
QuickActionDefinition qad = new QuickActionDefinition();
qad.setDeveloperName("MyQuickCreateTaskAction");
qad.setObjectType("Global");
qad.setTargetObjectType("Task");
qad.setMasterLabel("Quick create a task");
qad.setType(QuickActionType.Create);
qad.setDescription("Quickly creates a Task");

sforce.create(new SObject[]{qad});
```

QuickActionList

Represents a list of quick actions.

This object is available in API version 32.0 and later.

Supported SOAP Calls

create(), query(), retrieve(), update(), upsert()

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|----------|---|
| LayoutId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Sort</p> <p>Description</p> <p>The ID of the associated layout.</p> |

Usage

A QuickActionList is a junction between QuickActionListItem objects and a layout. If a layout doesn't have an associated QuickActionList, it inherits the actions from the global page layout.

The following example retrieves all quick action lists in an organization and their associated layout ID.

```
String query = "SELECT Id,LayoutId FROM QuickActionList";
SObject[] records = sforce.query(query).getRecords();

for (int i = 0; i < records.length; i++) {
    QuickActionList list = (QuickActionList)records[i];
    String relatedLayoutId = list.get("LayoutId");
}
```

QuickActionListItem

Represents an item in a quick action list.

This object is available in API version 32.0 and later.

Supported SOAP Calls

create(), delete(), query(), retrieve(), update(), upsert()

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|-----------------------|---|
| QuickActionDefinition | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The enum name or ID of the QuickActionDefinition that's associated with this list item. Valid values are:</p> <ul style="list-style-type: none"> • <code>Case.ChangeStatus</code> • <code>Case.LogACall</code> • <code>FeedItem.ContentPost</code> • <code>FeedItem.LinkPost</code> • <code>FeedItem.MobileSmartActions</code> • <code>FeedItem.PollPost</code> • <code>FeedItem.QuestionPost</code> • <code>FeedItem.TextPost</code> |
| QuickActionListId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The ID of the QuickActionList associated with this list item.</p> |
| SortOrder | <p>Type int</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The order in which this list item appears in the picklist. This field must be an ordinal number greater than 0, and must be unique in the list.</p> |

Usage

A QuickActionListItem associates a QuickActionDefinition with a QuickActionList. You can query to find out which quick actions are in a list, insert or delete to add or remove quick actions from a list, and update to change the order of quick actions in the list.

The following example reverses the order in the list of the actions, and then removes the first action from the list.

```
String query = "SELECT Id,SortOrder FROM QuickActionListItem Where QuickActionListId='" + listId + "'"
```

```
SObject[] records = sforce.query(query).getRecords();

for(int i=0;i<records.length;i++) {
    QuickActionListItem item = (QuickActionListItem)records[i];
    item.setSortOrder(records.length-i);
}

sforce.update(records);

// Last record in array is first record in reordered list
sforce.delete(records[records.length-1].getId());
```

RecentlyViewed

Represents metadata entities typically found in Setup such as page layout definitions, workflow rule definitions, and email templates that the current user has recently viewed.

This object is available in the Tooling API version 33.0 and later.

Supported SOAP Calls

`query()`, `update()`,

Supported REST HTTP Methods

GET

Special Usage Rules

The RecentlyViewed object supports the following metadata entities:

- Apex classes
- Apex triggers
- Approval processes
- Apps
- Custom report types
- Email templates
- Fields
- Objects
- Page layouts
- Permission sets
- Profiles
- Static resources
- Tabs
- Users
- Validation rules

- Visualforce pages
- Visualforce components
- Workflow email alerts
- Workflow field updates
- Workflow outbound messages
- Workflow rules
- Workflow tasks

Fields

| Field | Details |
|-----------|---|
| Alias | Type string Properties Filter, Group, Nillable, Sort Description The alias on the item. |
| Email | Type email Properties Filter, Group, Nillable, Sort Description The email address on the item. |
| FirstName | Type string Properties Filter, Group, Nillable, Sort Description The first name on the item. |
| Id | Type ID Properties Defaulted on create, Filter, Group, Sort Description The ID of the recently viewed item. |
| IsActive | Type boolean |

| Field | Details |
|--------------------|---|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the recently viewed item is an active user (true) or not (false). This field contains a value only if the recently viewed item is a user.</p> |
| LastName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The last name on the item.</p> |
| LastReferencedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort, Update</p> <p>Description The timestamp for when the current user last viewed an item related to this item.</p> |
| LastViewedDate | <p>Type dateTime</p> <p>Properties Filter, Nillable, Sort, Update</p> <p>Description The timestamp for when the current user last viewed this item. If this value is null, this item might only have been referenced (see <code>LastReferencedDate</code>) and not viewed.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description If the recently viewed item is a user, this is the user's name. Specifically, it's the concatenation of the <code>FirstName</code> and <code>LastName</code> field values.</p> |
| NetworkId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field | Details |
|---------------|---|
| | Description The ID of the Experience Cloud site that this recently viewed item is part of. This field is available only if digital experiences is enabled in your org. |
| Phone | Type phone Properties Filter, Group, Nillable, Sort Description The phone number on the item. |
| ProfileId | Type reference Properties Filter, Group, Nillable, Sort Description If the recently viewed item is a user, this is the user's profile ID. |
| RelatedObject | Type picklist Properties Filter, Group, Nillable, Restricted picklist, Sort Description The object that the recently viewed item is related to. For example, if the recently viewed item is an Account Custom Field, then the related object will be Account. Not all recently viewed items will have a related object. |
| Title | Type string Properties FilterGroupable, Sort Description If the recently viewed item is a user, this is the user's title. For example, CFO or CEO. |
| Type | Type picklist Properties Filter Group NillableRestricted picklist Sort Description The sObject type for this recently viewed item. |

| Field | Details |
|------------|--|
| UserRoleId | <p>Type reference</p> <p>Properties FilterGroupNillableSort</p> <p>Description The ID of the user role associated with this object.</p> |

Usage

This object provides a heterogeneous list of different metadata types and consists of recently viewed records. A record is considered viewed when the user sees the details associated with it, but not when the user sees it in a list with other records. Use this object to programmatically construct a list of recently viewed items specific to the current user, for example, on a custom user interface or for search auto-complete options. You can also retrieve a filtered list of records by object type (`Type`). The `RecentlyViewed` data is periodically truncated down to 200 records per object. `RecentlyViewed` data is retained for 90 days, after which it is removed on a periodic basis.

Use this query in your code to retrieve a list of all the records that were recently viewed. The results are ordered from most to least recent.

```
SELECT Id, Name
FROM RecentlyViewed
WHERE LastViewedDate !=null
ORDER BY LastViewedDate DESC
```

Use this query to retrieve data that was either viewed or referenced, but only for a limited set of objects.

```
SELECT Id, Name
FROM RecentlyViewed
WHERE Type IN ('CustomEntityDefinition', 'CustomFieldDefinition')
ORDER BY LastViewedDate DESC
```

RecommendationStrategy

Represents a recommendation strategy. Recommendation strategies are applications, similar to data flows, that determine a set of recommendations to be delivered to the client through data retrieval, branching, filtering, and logic operations. Available in API 45.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`

Fields

| Field | Details |
|-------------------|--|
| ContextRecordType | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The sObject type of the \$Record used by the flow.</p> |
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Description of the recommendation strategy.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the recommendation strategy in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name.</p> |
| Fullname | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata type in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsTemplate | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> |

| Field | Details |
|-----------------|--|
| | <p>Description</p> <p>Indicates whether the recommendation strategy is a template (<code>true</code>) or not (<code>false</code>). When installed from managed packages, recommendation strategies can't be viewed or cloned by subscribers because of intellectual property (IP) protection. But when those recommendation strategies are templates, subscribers can open them in a builder, clone them, and customize the clones. The default value is <code>false</code>. Available in API version 47.0 and later.</p> |
| Label | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>Required. Label for the recommendation strategy.</p> |
| Language | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>The language of the recommendation strategy.</p> |
| ManageableState | <p>Type</p> <p>ManageableState enumerated list</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> |

| Field | Details |
|----------------------|--|
| | <p>Description</p> <p>Master label for the recommendation strategy. This display value is the internal label that is not translated. Limit: 40 characters.</p> |
| Metadata | <p>Type</p> <p><code>mns : RecommendationStrategy</code></p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>The recommendation strategy's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. If the recommendation strategy is part of a managed package, this field will be Null. Metadata isn't returned for recommendation strategies in managed packages, unless the recommendation strategies are templates.</p> |
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| OnBehalfOfExpression | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Formula expression defining the intended target of the recommendations (for example, the Contact associated with a Case). Mainly used for reaction tracking.</p> |

RecordActionDeployment

Represents configuration settings for the Actions & Recommendations and Action Launcher components. RecordActionDeployment is available in API version 45.0 and later.

Supported SOAP Calls


`create()`, `delete()`, `describeLayout()`, `describeSObject()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, HEAD, PATCH, POST, DELETE

Fields

| Field | Details |
|-----------------------|--|
| ChannelConfigurations | <p>Type mns:RecordActionDeploymentChannel</p> <p>Properties Not applicable.</p> <p>Description Channel default settings for the deployment. This field is visible only in the metadata for a record.</p> |
| ComponentName | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Specifies the name of the component used in the deployment. Possible values are:</p> <ul style="list-style-type: none"> • <code>ActionLauncher—1</code> • <code>ActionsAndRecommendations—0</code> <p>Available in API version 56.0 and later.</p> |
| DeploymentContexts | <p>Type mns:RecordActionDeploymentContext</p> <p>Properties Not applicable.</p> <p>Description Object context for the deployment. This field is visible only in the metadata for a record. Available in API version 46.0 and later.</p> |

| Field | Details |
|------------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description A unique name for this record action deployment. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Provides a globally unique identifier for the record action deployment, which prevents conflicts with other record action deployments that have the same MasterLabel.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| FullName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name used as the record action deployment identifier for API access. The <code>fullName</code> can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| HasGuidedActions | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, indicates that the component shows standard actions; for example, flows and quick actions. Available in API version 46.0 and later.</p> |
| HasOmniScripts | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the record actions deployment includes OmniScripts (<code>true</code>) or not (<code>false</code>). Available in API version 56.0 and later.</p> <p>The default value is <code>false</code>.</p> |

| Field | Details |
|--------------------|--|
| HasRecommendations | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, indicates that the component shows recommendations from a Next Best Action strategy. Available in API version 46.0 and later.</p> |
| Language | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The language of the record action deployment. The following values are supported:</p> <ul style="list-style-type: none"> Chinese (Simplified): <code>zh_CN</code> Chinese (Traditional): <code>zh_TW</code> Danish: <code>da</code> Dutch: <code>nl_NL</code> English: <code>en_US</code> Finnish: <code>fi</code> French: <code>fr</code> German: <code>de</code> Italian: <code>it</code> Japanese: <code>ja</code> Korean: <code>ko</code> Norwegian: <code>no</code> Portuguese (Brazil): <code>pt_BR</code> Russian: <code>ru</code> Spanish: <code>es</code> Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations. Swedish: <code>sv</code> Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> |

| Field | Details |
|-----------------|---|
| | <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The name of the deployment.</p> |
| Metadata | <p>Type mns:RecordActionDeployment</p> <p>Properties Create, Nillable, Update</p> <p>Description Metadata that defines record action deployments. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with the record action deployment, which is assigned to the AppExchange package. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. The namespace helps differentiate custom objects and fields from those in use by other record action deployments.</p> |
| Recommendation | <p>Type mns:RecordActionRecommendation</p> <p>Properties Not applicable.</p> |

| Field | Details |
|-----------------|---|
| | Description Settings for how Next Best Action recommendations appear. This field is visible only in the metadata for a record. Available in API version 46.0 and later. |
| SelectableItems | Type mns:RecordActionSelectableItem Properties Not applicable. Description A subset of actions that users can launch at runtime. This field is visible only in the metadata for a record. |

RecordType

Represents a custom record type.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`create()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, PATCH, POST

Fields

| Field | Details |
|-------------------|---|
| BusinessProcessId | Type ID Properties Create, Filter, Group, Nillable, Sort, Update Description ID of an associated BusinessProcess. |
| Description | Type string Properties Filter, Group, Nillable, Sort |

| Field | Details |
|--------------------|---|
| | Description The record type description, limited to 255 characters. |
| EntityDefinitionId | Type string Properties Filter, Group, Sort Description The ID of the entity containing the record. |
| FullName | Type string Properties Create, Group, Nillable Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |
| IsActive | Type boolean Properties Defaulted on create, Filter, Group, Sort, Update Description Indicates whether this record is active (<code>true</code>) or not (<code>false</code>). Only active record types can be applied to records. |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort Description Indicates the manageable state of the specified component that is contained in a package: <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> • <code>installedEditable</code> • <code>released</code> |

| Field | Details |
|-----------------|---|
| | <ul style="list-style-type: none">unmanaged |
| Metadata | <p>Type RecordTypeMetadata</p> <p>Properties Create, Nillable, Update</p> <p>Description Record metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Name | <p>Type string</p> <p>Properties Nillable</p> <p>Description The record type name.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Nillable</p> <p>Description A unique string to distinguish this type from any others.</p> |
| ObjectType | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The type of standard object that this record type is derived from.</p> |

RelatedListColumnDefinition

Represents information about a column in a related list. A related list specifies a set of records for a related object, based on specific criteria. This object is available in API version 55.0 and later.

Supported SOAP API Calls

`describeSObjects()`, `query()`

Supported REST API Methods

Query

Special Access Rules

This object is read-only.

Fields

| Field | Details |
|-------------------|---|
| Alias | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique alias of the column in the related list.</p> |
| ColumnSql | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The SOQL query string used in a SELECT clause for the column.</p> |
| DataType | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The field type of the column.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique identifier for the column. Always retrieve this value before using it, as the value can change from one release to the next. Simplify queries by using this field instead of making multiple queries.</p> |
| FieldDefinitionId | <p>Type string</p> |

| Field | Details |
|---------------|---|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the FieldDefinition associated with the column, if applicable. This is a relationship field.</p> <p>Relationship Name FieldDefinition</p> <p>Relationship Type Lookup</p> <p>Refers To FieldDefinition</p> |
| IsDefault | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the column appears on the related list by default (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| IsDescribable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the column can appear in the results of a <code>describeLayout</code> call containing the related list (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The label for the column.</p> |
| LookupId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field | Details |
|-------------------------|---|
| | Description The lookup ID for the column. |
| RelatedListDefinitionId | Type string Properties Filter, Group, Nillable, Sort Description The ID of the RelatedListDefinition that contains the column. This is a relationship field. Relationship Name RelatedListDefinition Relationship Type Lookup Refers To RelatedListDefinition |

Usage

Find all available columns on a related list definition.

```
SELECT Alias, ColumnSoql, DurableId FROM RelatedListColumnDefinition WHERE
RelatedListDefinitionId = 'Account.Opportunities'
```

RelatedListDefinition

Represents information about a related list. A related list specifies a set of records for a related object, based on specific criteria. This object is available in API version 55.0 and later.

Supported SOAP API Calls

`describeSObjects()`, `query()`

Supported REST API Methods

`Query`

Special Access Rules

This object is read-only.

Fields

| Field | Details |
|--------------------|---|
| DefaultSort | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The default sort string for the related list.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique identifier for the related list. Always retrieve this value before using it, as the value can change from one release to the next. Simplify queries by using this field instead of making multiple queries.</p> |
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the entity containing the related list. This is a relationship field.</p> <p>Relationship Name EntityDefinition</p> <p>Relationship Type Lookup</p> <p>Refers To EntityDefinition</p> |
| IsCustomizable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether columns on the related list can be customized (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |

| Field | Details |
|--------------------------|--|
| IsDescribable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the related list can appear in <code>describeLayout</code> call results (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| IsLayoutable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the related list can be assigned to a layout. (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The label for the related list.</p> |
| ParentEntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the <code>ParentEntityDefinition</code> that's associated with the rows in the related list. This is a relationship field.</p> <p>Relationship Name <code>ParentEntityDefinition</code></p> <p>Relationship Type Lookup</p> <p>Refers To EntityDefinition</p> |
| RelatedListId | <p>Type string</p> |

| Field | Details |
|-----------------|--|
| | Properties Filter, Group, Nillable, Sort Description The ID of the related list. |
| RelatedListName | Type string Properties Filter, Group, Nillable, Sort Description The unique name of the related list in the API. |

Usage

Find all available related lists for a given entity, for example, an Account record.

```
SELECT DurableId, Label, RelatedListName FROM RelatedListDefinition WHERE
ParentEntityDefinitionId = 'Account'
```

RelationshipDomain

Represents the relationship an object has with other objects. RelationshipDomain allows you to write simpler queries. For example, “which objects are the child objects for the object defined in `ParentObject`” is easier using RelationshipDomain. Available in Tooling API version 34.0 and later.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|-----------------|---|
| ChildSubject | Type EntityDefinition Properties Filter, Group, Sort Description Metadata for the child object, if any. |
| ChildSubjectId | Type string Properties Filter, Group, Nillable, Sort Description ID of the <code>ChildSubject</code> . |
| DurableId | Type string Properties Filter, Group, Nillable, Sort Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field. |
| Field | Type FieldDefinition Properties Filter, Group, Sort Description The relationship field on this object that defines the relationship to <code>ChildSubject</code> or <code>ParentSubject</code> . |
| FieldId | Type string Properties Filter, Group, Nillable, Sort Description ID of <code>Field</code> . |
| IsCascadeDelete | Type boolean |

| Field | Details |
|------------------------------------|---|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, this object's parent can't be deleted until all records for this object are deleted. Corresponds to <code>Cascade</code> value for <code>DeleteConstraint</code> in the Metadata API.</p> |
| <code>IsDeprecatedAndHidden</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, this object is unavailable for the current version.</p> |
| <code>IsRestrictedDelete</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, this object can't be deleted. Corresponds to <code>Restrict</code> value for <code>DeleteConstraint</code> in the Metadata API.</p> |
| <code>JunctionIdListNames</code> | <p>Type complexvalue</p> <p>Properties Nillable</p> <p>Description The names of the lists of junction IDs associated with an object. Each ID represents an object that has a relationship with the associated object.</p> |
| <code>ParentSubject</code> | <p>Type EntityDefinition</p> <p>Properties Filter, Group, Sort</p> <p>Description Metadata for the parent object, if any.</p> |
| <code>ParentSubjectId</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the <code>ParentSubject</code>.</p> |

| Field | Details |
|--------------------|--|
| RelationshipInfo | Type RelationshipInfo Properties Filter, Group, Sort Description Properties about the relationship. |
| RelationshipInfoId | Type string Properties Filter, Group, Nillable, Sort Description ID of <code>RelationshipInfo</code> for this relationship domain. |
| RelationshipName | Type string Properties Filter, Group, Nillable, Sort Description Name of this relationship. |

RelationshipInfo

Represents the properties of a relationship between objects. Simplify queries with `RelationshipInfo`, such as answering the question “which objects are parent objects for the object defined in `ChildSubject`”. Available in Tooling API version 34.0 and later.

Supported SOAP Calls

`query()`, `search()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|-----------------|---|
| ChildSubject | <p>Type EntityDefinition</p> <p>Properties Filter, Group, Sort</p> <p>Description Metadata for the child object, if any.</p> |
| ChildSubjectId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the <code>ChildSubject</code>.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| Field | <p>Type FieldDefinition</p> <p>Properties Filter, Group, Sort</p> <p>Description The relationship field that defines the relationship to <code>ChildSubject</code> or <code>ParentSubject</code>.</p> |
| FieldId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of <code>Field</code>.</p> |
| IsCascadeDelete | <p>Type boolean</p> |

| Field | Details |
|------------------------------------|---|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, this object's parent can't be deleted until all records for this object are deleted. Corresponds to <code>Cascade</code> value for <code>DeleteConstraint</code> in the Metadata API.</p> |
| <code>IsDeprecatedAndHidden</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, this object is unavailable for the current version.</p> |
| <code>IsRestrictedDelete</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, this object can't be deleted. Corresponds to <code>Restrict</code> value for <code>DeleteConstraint</code> in the Metadata API.</p> |
| <code>JunctionIdListNames</code> | <p>Type complexvalue</p> <p>Properties Nillable</p> <p>Description The names of the lists of junction IDs associated with an object. Each ID represents an object that has a relationship with the associated object.</p> |
| <code>RelationshipDomains</code> | <p>Type QueryResult</p> <p>Properties Filter, Group, Sort</p> <p>Description The <code>RelationshipDomain</code> records associated with this object. Because this field represents a relationship, use only in subqueries.</p> |

ReleaseUpdate

Represents an individual release update. Available in API version 50.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`



Supported REST HTTP Methods

Query

Fields

| Field | Details |
|---------------|--|
| ApiVersion | <p>Type double</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The API version to which the update is applied.</p> |
| Category | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Indicates the type of the release update. For example, "Security" or "Usability."</p> |
| Description | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The description of the update that appears on the front of the card.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The unique name of the release update.</p> |
| DueDate | <p>Type date</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field | Details |
|--------------|---|
| | Description The date by which test runs must be completed. |
| DurableId | Type string Properties Filter, Group, Nillable, Sort Description The unique name of the release update. |
| HasNewSteps | Type boolean Properties Defaulted on create, Filter, Group, Sort Description Indicates if steps have been added to the release update since its original release (<code>true</code>) or not (<code>false</code>). |
| IsReleased | Type boolean Properties Defaulted on create, Filter, Group, Sort Description Indicates if the update is released (<code>true</code>) or not (<code>false</code>). |
| NumCompSteps | Type integer Properties Filter, Group, Nillable, Sort Description Indicates how many steps have been completed in the update. |
| NumReqSteps | Type integer Properties Filter, Group, Nillable, Sort Description Indicates the total number of required steps before proceeding with test run. |
| NumSteps | Type integer |

| Field | Details |
|--------------|--|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Indicates the total number of all steps in the update.</p> |
| Release | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The release, including patch number, in which the update is available. For example, 50.00.00.</p> <p> Note: Also see <code>ReleaseDate</code> and <code>ReleaseLabel</code>.</p> |
| ReleaseDate | <p>Type date</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The date in which the update is enforced.</p> <p> Note: Only specified if the update is part of a scheduled release, so either <code>Release</code> or <code>ReleaseDate</code> will be non-null. Also see <code>Release</code> and <code>ReleaseLabel</code>.</p> |
| ReleaseLabel | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The release label in which the update is enforced. For example, "Winter '21." The label could also be a formatted date if <code>Release</code> is null and <code>ReleaseDate</code> is non-null.</p> |
| Status | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Values include:</p> <ul style="list-style-type: none"> • Complete: The update has been applied. • Info: An information-only update; no actions to take. • Invocable: The update is not yet applied; ready for invocation. • Invoked: The update has been invoked but can't be revoked yet. |

| Field | Details |
|----------------|--|
| | <ul style="list-style-type: none"> Nascent: The update has incomplete steps so test run can't be run yet. Pending: The Complete Steps By date is in the past and update is awaiting enforcement. Revocable: The update is in test run mode. |
| StepStage | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Indicates the stage in which the update is at. Options include Needs Action, Due Soon, Overdue, and Archived.</p> |
| SupportsRevoke | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates if the update has a test run(<code>true</code>) or not (<code>false</code>). Default is false.</p> |
| Title | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The release update title that appears at the top of the release update in the UI.</p> |

RemoteProxy

Represents a set of remote site settings that allows you to access an external site from Salesforce. Use RemoteProxy when accessing external sites called by Visualforce pages, Apex callouts, or JavaScript codes using XMLHttpRequest in an s-control or custom button. To be accessible, an external site must have its settings defined with RemoteProxy or registered in the Remote Site Settings page. Available in Tooling API version 37.0 and later.

Supported SOAP Calls

`create()`, `query()`, `retrieve()` `update()`



Supported REST HTTP Methods

GET

Fields

| Field | Details |
|-----------------|--|
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The description explaining what this remote site setting is used for.</p> |
| EndpointUrl | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. The URL of the remote site.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The unique name used as the remote site identifier for API access. The name can contain only underscores and alphanumeric characters. It must be unique, begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Required. Indicates whether the remote site setting is active (<code>true</code>) or not (<code>false</code>).</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> |

| Field | Details |
|------------------|---|
| | <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged <p>This field is available in API version 38.0 and later.</p> |
| Metadata | <p>Type complexvalue</p> <p>Properties Create, Nillable, Update</p> <p>Description Metadata that defines the remote site setting.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix of up to 15 characters. You can refer to a component in a managed package by using the <code>namespacePrefix__componentName</code> notation. The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, NamespacePrefix is set only for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| ProtocolMismatch | <p>Type boolean</p> |

| Field | Details |
|----------|---|
| | <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort</p> <p>Description</p> <p>Required. Indicates whether code within Salesforce can access the remote site regardless of whether the user's connection is over HTTP or HTTPS (<code>true</code>) or not (<code>false</code>). When <code>true</code>, code within Salesforce can pass data between HTTPS and HTTP sessions.</p> <p> Warning: Only set to <code>true</code> if you understand the security implications.</p> <p> Note: This field corresponds to the <code>disableProtocolSecurity</code> field in the Metadata API type.</p> |
| SiteName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>Required. The name of the remote site.</p> |

RestrictionRule

Represents a restriction rule or a scoping rule. A restriction rule has `EnforcementType` set to `Restrict` and controls the access that specified users have to designated records. A scoping rule has `EnforcementType` set to `Scoping` and controls the default records that your users see without restricting access.

This object is available in API version 52.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`


Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

Only users with the View Restriction and Scoping Rules permission can view restriction rules and scoping rules via the API. Only users with the Manage Sharing permission can view, create, update, and delete restriction rules and scoping rules.

Fields

| Field | Details |
|-----------------|--|
| Description | <p>Type textarea</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Required. The description of the rule.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name for the RestrictionRule object. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| EnforcementType | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Restricted picklist, Sort</p> <p>Description Required. The type of rule. Possible values are:</p> <ul style="list-style-type: none"> • <code>FieldRestrict</code>—Don't use. • <code>Restrict</code>—Restriction rule. • <code>Scoping</code>—Scoping rule. |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description Required. The full name of the associated RestrictionRule in Metadata API. The full name can include a namespaceprefix.</p> |

| Field | Details |
|--------------|---|
| | <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the rule is active (<code>true</code>) or not (<code>false</code>). The default value is <code>false</code>.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the rule. The value for this field is the language value of the org.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Label for the rule.</p> |
| Metadata | <p>Type <code>mns</code> : RestrictionRule</p> <p>Properties Create, Nillable, Update</p> <p>Description The restriction rule's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| RecordFilter | <p>Type textarea</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Required. The criteria that determine which records are accessible via the rule.</p> |

| Field | Details |
|--------------|---|
| TargetEntity | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Required. The object for which you're creating the rule. We recommend that you don't edit this field after the rule is created.</p> <p>If <code>EnforcementType</code> is set to <code>Restrict</code>, custom objects, external objects, and these objects are supported:</p> <ul style="list-style-type: none"> Contract Event Task TimeSheet TimeSheetEntry <p>If <code>EnforcementType</code> is set to <code>Scoping</code>, custom objects and these objects are supported:</p> <ul style="list-style-type: none"> Account Case Contact Event Lead Opportunity Task |
| UserCriteria | <p>Type textarea</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description Required. The users that this rule applies to, such as all active users or users with a specified role or profile.</p> |
| Version | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description Required. The rule's version number.</p> |

Usage

For more information on restriction rules, see the Restriction Rules Developer Guide.

SEE ALSO:

https://developer.salesforce.com/docs/atlas.en-us.restriction_rules.meta/restriction_rules/restriction_rules_about.htm

SandboxInfo

Represents a sandbox.

SandboxInfo enqueues a sandbox for creation or refresh. A create operation on SandboxInfo represents creation of a new sandbox, and an update represents refresh of an existing sandbox. For every creation or update, a SandboxProcess is automatically created and is used for monitoring the sandbox copy process.

This object is available in API version 35.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`

Supported REST HTTP Methods

GET, PATCH, POST, DELETE

Fields

| Field | Details |
|--------------|--|
| ApexClassId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>A reference to the ID of an Apex class that runs after each copy of the sandbox. Allows you to perform business logic on the sandbox to prepare it for use.</p> <p>Restrictions</p> <ul style="list-style-type: none">You can specify this value only during sandbox creation.The class must extend the <code>System.SandboxPostCopy</code> interface.Available in API version 36.0 and later. |
| AutoActivate | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Create, Defaulted on create, Filter, Group, Sort, Update</p> |

| Field | Details |
|------------------------|--|
| | <p>Description If <code>true</code>, you can activate a sandbox refresh immediately.</p> <p>Restrictions This field only affects behavior for update operations (Sandbox refresh).</p> |
| CopyArchivedActivities | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description If <code>true</code>, archived activity data is copied to the sandbox.</p> <p>Restrictions This field is visible only if your organization has purchased an option to copy archived activities for sandbox. To obtain this option, contact Salesforce Customer Support. You can set the value to <code>true</code> only for a Full sandbox.</p> |
| CopyChatter | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description If <code>true</code>, archived Chatter data is copied to the sandbox.</p> <p>Restrictions You can set the value to <code>true</code> only for a Full sandbox.</p> |
| Description | <p>Type string</p> <p>Properties Create, Filter, Nillable, Sort, Update</p> <p>Description A description of the sandbox, which helps you distinguish it from other sandboxes.</p> <p>Restrictions The description length can't exceed 1,000 characters.</p> |
| HistoryDays | <p>Type int</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Represents the number of days of object history to be copied in the sandbox. Valid values:</p> |

| Field | Details |
|-------------|--|
| | <ul style="list-style-type: none"> • -1, which means all available days • 0 (default) • 10 • 20 • 30 • 60 • 90 • 120 • 150 • 180 <p>Restrictions</p> <p>This field affects behavior only for Full sandboxes.</p> |
| LicenseType | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description</p> <p>Represents the sandbox license type. Valid values:</p> <ul style="list-style-type: none"> • DEVELOPER • DEVELOPER_PRO • PARTIAL • FULL |
| SandboxName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Filter, Group, idLookup, Sort, Update</p> <p>Description</p> <p>Name of the sandbox.</p> <p>Restrictions</p> <ul style="list-style-type: none"> • Must be a unique sandbox name. • Must be alphanumeric characters. • Must be 10 or fewer characters. • Can't be the same as the name of a sandbox that's pending deletion. |
| SourceId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> |

| Field | Details |
|------------|---|
| | Description A reference to the ID of a SandboxInfo that serves as the source org for a cloned sandbox. |
| TemplateId | Type reference Properties Create, Filter, Group, Nillable, Sort, Update Description A reference to the PartitionLevelScheme that represents the sandbox template associated with this sandbox. A sandbox template lets you select which objects to copy in a sandbox. Restrictions <ul style="list-style-type: none"> Setting a TemplateId value for a Partial Copy sandbox is required. Setting a TemplateId value for a Full sandbox is optional. Setting a TemplateId value for other sandbox types is prohibited, because other sandbox types don't support sandbox templates. |

Usage

SandboxInfo and [SandboxProcess](#) work together to manage the creation or refresh of a sandbox.

Creating a Sandbox

To enqueue a new sandbox:

1. Create a SandboxInfo record.
2. To find the status of a sandbox after it is enqueued, query SandboxProcess for a given SandboxInfoId field to find the latest SandboxProcess record. The value of Completed in Status indicates that the creation process is finished.

Refreshing a Sandbox

To refresh a sandbox:

1. To start a sandbox refresh, edit the SandboxInfo record.
2. To find the status of a sandbox after it is enqueued, find the latest SandboxProcess record by querying SandboxProcess for a given SandboxInfoId value. The value of Status indicates the current state of the process.
3. When the Status field value is Pending Activation, change the value of the RefreshAction field to either ACTIVATE or DISCARD.

Deleting a Sandbox

To delete a sandbox, delete the SandboxInfo record that represents the sandbox. Deleting the SandboxInfo record deletes the sandbox and frees up a license.

SandboxProcess

Represents the sandbox copy process for a SandboxInfo record.

When you create a SandboxInfo record, a corresponding SandboxProcess record is created. The latest SandboxProcess record for a SandboxInfo record represents the current state of the sandbox.

This object is available in API version 35.0 and later.

Supported SOAP Calls

`query()`, `retrieve()`, `update()`

Supported REST HTTP Methods

GET, PATCH

Fields

Except for `RefreshAction`, all fields are read only. The read-only fields represent the attributes chosen on `SandboxInfo` when a copy process was enqueued, or represent the state of the process for monitoring purposes.

| Field | Details |
|---------------|---|
| ActivatedById | Type reference Properties Filter, Group, Nillable, Sort Description A reference to the ID of the user who requested sandbox activation. |
| ActivatedDate | Type dateTime Properties Filter, Nillable, Sort Description Represents when the sandbox was activated during a refresh. |
| ApexClassId | Type reference Properties Filter, Group, Nillable, Sort Description A reference to the ID of an Apex class to run after each copy of the sandbox. Running this class allows you to perform DML operations on the sandbox to prepare it for use. This field can be |

| Field | Details |
|-------------------------------------|--|
| | specified only during sandbox creation. The class must extend the <code>System.SandboxPostCopy</code> interface. Available in API version 36.0 and later. |
| <code>AutoActivate</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Represents whether the sandbox refresh is configured to activate immediately upon completion.</p> |
| <code>CopyArchivedActivities</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, archived activity data is copied to the sandbox.</p> <p>Restrictions This field is visible only if your organization has purchased an option to copy archived activities for sandbox. To obtain this option, contact Salesforce Customer Support. You can set the value to <code>true</code> only for a Full sandbox.</p> |
| <code>CopyChatter</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Represents whether archived Chatter data is copied to the sandbox.</p> |
| <code>CopyProgress</code> | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents how much of a copy has been completed. Available for Developer, Developer Pro, and Full sandboxes. Not available for Full or Partial sandboxes created from sandbox templates.</p> |
| <code>Description</code> | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> |

| Field | Details |
|-------------|--|
| | Description A description of the sandbox, which helps you distinguish it from other sandboxes. |
| EndDate | Type dateTime Properties Filter, Nillable, Sort Description Represents when the sandbox copy process finished. |
| HistoryDays | Type int Properties Defaulted on create, Filter, Group, Sort Description Represents the number of days of object history to be copied in the sandbox. Valid values: <ul style="list-style-type: none">• -1, which means all available days• 0• 10• 20• 30• 60• 90• 120• 150• 180 |
| LicenseType | Type picklist Properties Filter, Group, Restricted picklist, Sort Description The sandbox license type. Valid values: <ul style="list-style-type: none">• DEVELOPER• DEVELOPER_PRO• PARTIAL• FULL |

| Field | Details |
|---------------------|---|
| RefreshAction | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Editing this field activates or discards a sandbox refresh. Valid values:</p> <ul style="list-style-type: none"> • ACTIVATE • DISCARD <p>Restrictions If all the following are true, you can activate or discard a sandbox refresh by editing the value in this field.</p> <ul style="list-style-type: none"> • This record is the latest SandboxProcess record. • The associated sandbox has been refreshed. • This record's Status is Pending Activation. |
| SandboxInfoId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description A reference to the ID of the SandboxInfo being processed (create or refresh).</p> |
| SandboxName | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> <p>Description The name of the sandbox.</p> |
| SandboxOrganization | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the org created by the copy process. This field is available in API version 37.0 and later.</p> |
| SourceId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort, Update</p> |

| Field | Details |
|------------|---|
| | <p>Description</p> <p>A reference to the ID of the SandboxInfo that this sandbox is a clone of. This field is used only when cloning a sandbox. When this field is used, <code>LicenseType</code> must be null. Your source sandbox must be an existing, completed sandbox, that belongs to the same production org as the sandbox you're creating or refreshing. Your <code>SourceId</code> value can't be the same SandboxInfo that you're updating. Available in API version 37.0 and later.</p> |
| StartDate | <p>Type</p> <p>dateTime</p> <p>Properties</p> <p>Filter, Nillable, Sort</p> <p>Description</p> <p>Represents when the sandbox copy process started.</p> |
| Status | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Current state of the sandbox copy process.</p> <p>Possible values include:</p> <ul style="list-style-type: none"> • Activating • Completed • Deleted • Deleting • Discarding • Locked • Locking • Pending • Pending Activation • Processing • Sampling • Stopped • Suspended |
| TemplateId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> |

| Field | Details |
|-------|---|
| | Description A reference to the ID of the PartitionLevelScheme that represents the sandbox template associated with the sandbox for this process. A sandbox template selects which objects to copy in a sandbox. |

Usage

[SandboxInfo](#) on page 690 represents a sandbox, and [SandboxProcess](#) represents the sandbox copy process, which occurs when you create a sandbox or refresh it. You can also delete a sandbox.

Creating a Sandbox

To enqueue a new sandbox:

1. Create a `SandboxInfo` record.
2. To find the status of a sandbox after it is enqueued, query `SandboxProcess` for a given `SandboxInfoId` field to find the latest `SandboxProcess` record. The value of `Completed` in `Status` indicates that the creation process is finished.

Refreshing a Sandbox

To refresh a sandbox:


1. To start a sandbox refresh, edit the `SandboxInfo` record.
2. To find the status of a sandbox after it is enqueued, find the latest `SandboxProcess` record by querying `SandboxProcess` for a given `SandboxInfoId` value. The value of `Status` indicates the current state of the process.
3. When the `Status` field value is `Pending Activation`, change the value of the `RefreshAction` field to either `ACTIVATE` or `DISCARD`.

Deleting a Sandbox

To delete a sandbox, delete the `SandboxInfo` record that represents the sandbox. Deleting the `SandboxInfo` record deletes the sandbox and frees up a license.

SchedulingObjective

Represents scheduling objective settings for Workforce Engagement. This object is available in API version 55.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`


Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules

This object is available only if Workforce Engagement is enabled in your org. To view, create, edit, and delete records, the user requires the Workforce Engagement Planner permission set.

Fields

| Field | Details |
|---------------|--|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata type in Metadata API. The full name can include a namespace prefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> |

| Field | Details |
|-------------------------|---|
| | <p>Description</p> <p>The language of the scheduling objective.</p> <p>Possible values are the supported languages in Workforce Engagement.</p> |
| MasterLabel | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, idLookup, Sort</p> <p>Description</p> <p>Label for the scheduling objective. In the UI, this field is Scheduling Objective.</p> |
| Metadata | <p>Type</p> <p>mns : SchedulingObjective</p> <p>Properties</p> <p>Create, Nillable, Update</p> <p>Description</p> <p>The scheduling objective's metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| SchedulingCategory | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>What the scheduling logic applies the objective to.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • A—Service Appointment • B—Shift |
| SchedulingObjectiveType | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>Specifies the type of scheduling objective.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • AgentPreference—In the UI, this value appears as Maximized Preferences. • BalanceNonStandardShifts |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> BalanceShifts |

SchedulingRule

Represents scheduling rule settings for Workforce Engagement. This object is available in API version 53.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`


Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules

This object is available only if Workforce Engagement is enabled in your org. To view, create, edit, and delete records, the user requires the Workforce Engagement Planner permission set.

Fields

| Field | Details |
|---------------|---|
| DeveloperName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> |

| Field | Details |
|--------------------|--|
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata type in Metadata API. The full name can include a namespace prefix. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the scheduling rule. Possible values are the supported languages in Workforce Engagement.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> <p>Description Label for the scheduling rule. In the UI, this field is Scheduling Rule.</p> |
| Metadata | <p>Type mns : SchedulingRule</p> <p>Properties Create, Nillable, Update</p> <p>Description The scheduling rule's metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| SchedulingCategory | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> |

| Field | Details |
|---------------------------------|--|
| | <p>Description</p> <p>Required. What the scheduling logic applies the rule to.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • <code>A</code>—Service Appointment • <code>B</code>—Shift |
| <code>SchedulingRuleType</code> | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>Specifies the type of rule.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • <code>A</code>—Active Resources • <code>B</code>—Match Skills • <code>C</code>—Availability • <code>LimitNonstandardShifts</code>—Specifies a rule type that limits how many non-standard shifts can be assigned to each agent. Available in API version 54.0 and later. • <code>M</code>—Match Territory • <code>Q</code>—Match Queues • <code>RestTimeMinutes</code>—Specifies a rule type that finds resources who have met the minimum rest time in minutes between consecutive shifts. Available in API version 56.0 and later. • <code>W</code>—Work Limit |

SearchLayout

Represents a search layout defined for an object.

This object is available in the Tooling API version 34.0 and later.

Supported SOAP Calls

`describeObjects()`, `query()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|--------------------|--|
| ButtonsDisplayed | <p>Type SearchLayoutButtonsDisplayed</p> <p>Properties Nillable</p> <p>Description The list of buttons available in list views for an object.</p> <p>This field is equivalent to the <code>Buttons Displayed</code> value in Object Name List View in the Search Layouts related list on the object detail page. It's also equivalent to the <code>listViewButtons</code> field on SearchLayouts in Metadata API.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. <code>DurableId</code> in queries allows you to find the right record without having to retrieve the entire record.</p> |
| EntityDefinition | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of the object associated with this search layout. Use in subqueries.</p> |
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the record in <code>EntityDefinition</code>. Use in subqueries.</p> |
| FieldsDisplayed | <p>Type SearchLayoutFieldsDisplayed</p> |

| Field | Details |
|------------|---|
| | <p>Properties Nillable</p> <p>Description The list of fields displayed in a search result for the object. The name field is required. It's always displayed as the first column header, so it isn't included in this list; all additional fields are included. The field name relative to the object name, for example <code>MyCustomField__c</code>, is specified for each custom field.</p> <p>This field is equivalent to the Search Results in the Search Layouts related list on the object detail page in the application user interface. It's also equivalent to <code>searchResultsAdditionalFields</code> in Metadata API.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The label for this search layout.</p> |
| LayoutType | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The type of search layout.</p> |
| ListLayout | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Identifies the list layout a search layout is related to. Available in API version 48.0 and later.</p> |
| Profile | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Identifies the profile to which a search layout applies. Available in API version 48.0 and later.</p> |

| Field | Details |
|-------------|---|
| ProfileName | Type string Properties Filter, Group, Nillable, Sort Description The name of the profile to which a search layout applies. Available in API version 48.0 and later. |

SearchLayoutButtonsDisplayed

| Type | Details |
|------------|---|
| applicable | Type boolean Description If <code>true</code> , the buttons listed in <code>buttons</code> apply to the object associated with this search layout. |
| buttons | Type SearchLayoutButton Description The list of buttons on the object associated with this search layout. |

SearchLayoutButton

| Type | Details |
|---------|--|
| apiName | Type string Description The API name of the button. |
| label | Type string Description The button's label text. |

SearchLayoutFieldsDisplayed

| Type | Details |
|-------------------------|---|
| <code>applicable</code> | Type boolean Description If <code>true</code> , the fields listed in <code>fields</code> are available in the object associated with this search layout. |
| <code>fields</code> | Type string Description The list of fields on the object associated with this search layout. |

SearchLayoutField

| Type | Details |
|-----------------------|--|
| <code>apiName</code> | Type string Description The API name of the field. |
| <code>label</code> | Type string Description The field's label text. |
| <code>sortable</code> | Type boolean Description If <code>true</code> , the fields can be sorted. |

SecurityHealthCheck

Represents your org's Health Check score. The score indicates how well your org's security settings comply with Salesforce-recommended values in the baseline standard. Only users with the "View Setup and Configuration" user permission can retrieve data from this object. Available in Tooling API version 37.0 and later.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|------------------|---|
| CustomBaselineId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Identifies which baseline is used to import settings and calculate score.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| Score | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The Health Check score for the org. The score can range from 0 to 100.</p> |

Usage

Use this object to query your org's Health Check score.

```
SELECT Score FROM SecurityHealthCheck
```

More Health Check information is available by querying the object [SecurityHealthCheckRisks](#) on page 710.

SecurityHealthCheckRisks

Represents your org's security setting values, risks, and Salesforce-recommended setting values. Only users with the "View Setup and Configuration" user permission can retrieve data from this object. Available in Tooling API version 37.0 and later.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|-------------|---|
| DurableId | Type string Properties Filter, Group, Nillable, Sort Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field. |
| OrgValue | Type string Properties Filter, Nillable, Sort Description The org's value for the security setting. |
| OrgValueRaw | Type string Properties Filter, Nillable, Sort Description The org's value for the security setting as it is stored in the database, usually without units of measure or extra text. For example, if the Minimum Password Length setting's OrgValue is 8 characters, the OrgValueRaw is 8. |
| RiskType | Type picklist |

| Field | Details |
|-----------------------|--|
| | <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The level of risk of the org's security setting value. Valid values are:</p> <ul style="list-style-type: none"> • HIGH_RISK • MEDIUM_RISK • MEETS_STANDARD |
| SecurityHealthCheckId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the Health Check score record associated with this field.</p> |
| Setting | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of the security setting. For example, <code>Minimum password length</code>.</p> |
| SettingGroup | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of the security setting group in which the setting resides in the Setup tree. For example, <code>Password Policies</code>.</p> |
| SettingRiskCategory | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The level of risk of the org's security settings. Available in version 40.0 and later. Valid values are:</p> <ul style="list-style-type: none"> • HIGH_RISK • MEDIUM_RISK • LOW_RISK • INFORMATIONAL |

| Field | Details |
|------------------|---|
| StandardValue | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description Salesforce-recommended standard value for the security setting.</p> |
| StandardValueRaw | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description Salesforce-recommended standard value for the security setting as it is stored in the database, usually without units of measure or extra text. For example, if the Minimum Password Length setting's StandardValue is 8 characters, the StandardValueRaw is 8.</p> |

Usage

Use this object to query your org's security setting values, risks, and Salesforce-recommended setting values. Reading security settings and their security status is useful if you have multiple Salesforce applications that require consistency and compliance in their security posture.

This query gets a list of your org's high risk settings.

```
SELECT RiskType, Setting, SettingGroup, OrgValue, StandardValue FROM SecurityHealthCheckRisks
where RiskType='HIGH_RISK'
```

This query gets your org's Health Check score and a list of your org's high risk settings.

```
SELECT Score, (SELECT RiskType, Setting, SettingGroup, OrgValue, StandardValue FROM
SecurityHealthCheckRisks where RiskType='HIGH_RISK') FROM SecurityHealthCheck
```

This query gets your org's Health Check score and the security settings that meet the Salesforce baseline standard.

```
SELECT Score, (SELECT RiskType, Setting, SettingGroup, OrgValue, StandardValue FROM
SecurityHealthCheckRisks where RiskType='MEETS_STANDARD') FROM SecurityHealthCheck
```

This query lists all the values in the Salesforce baseline standard.

```
SELECT Setting, SettingGroup, StandardValue FROM SecurityHealthCheckRisks
```

ServiceFieldType

Deprecated in API version 34.0, the ServiceFieldType object is removed in version 58.0 and later.

Scontrol

Represents a custom s-control, which is custom content that our system hosts, but client applications execute. An s-control can contain any type of content that you can display or run in a Web browser.



Important: Visualforce pages supersede s-controls. Organizations that haven't previously used s-controls can't create them. Existing s-controls are unaffected, and can still be edited. We recommend that you move your s-controls to Visualforce. We continue to support this object.

Supported SOAP Calls

`query()`

Supported REST Methods


GET

Special Access Rules

- Your organization must be using Enterprise, Developer, or Unlimited Edition and be enabled for custom s-controls.
- Customer Portal users can't access this object.

Fields

| Field | Details |
|---------------|--|
| ContentSource | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description Specify the source of the s-control content, either custom HTML, a snippet (s-controls that are included in other s-controls), or a URL.</p> |
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort, Update</p> <p>Description Description of the custom s-control.</p> |
| DeveloperName | <p>Type string</p> |

| Field | Details |
|-----------------|---|
| | <p>Properties Filter, Group, Sort, Update</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is S-Control Name.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, Salesforce generates one for each record, which slows performance.</p> |
| EncodingKey | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort, Update</p> <p>Description Picklist of character set encodings, including ISO-08859-1, UTF-8, EUC, JIS, Shift-JIS, Korean (ks_c_5601-1987), Simplified Chinese (GB2312), and Traditional Chinese (Big5).</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Name | <p>Type string</p> <p>Properties Filter, Group, Sort, Update</p> |

| Field | Details |
|-----------------|--|
| | <p>Description</p> <p>Required. Name of this custom s-control. Label is Label.</p> |
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| SupportsCaching | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort, Update</p> <p>Description</p> <p>Indicates whether the s-control supports caching (<code>true</code>) or not (<code>false</code>).</p> |

Usage

Use custom s-controls to manage custom content that extends application functionality. All users can view custom s-controls, but the “Customize Application” permission is required to create or update custom s-controls.

ShiftSegmentType

Represents shift segment type settings for Shift Scheduling and Workforce Engagement. This object is available in API version 55.0 and later.

 **Important:** Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods


`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

This object is available only if Shift Scheduling or Workforce Engagement is enabled in your org. To view, create, edit, and delete records, the user requires the Shift Scheduling Planner or Workforce Engagement Planner permission set.

Fields

| Field | Details |
|---------------------------------|--|
| <code>AdherenceThreshold</code> | <p>Type int</p> <p>Properties Filter, Group, Sort</p> <p>Description A threshold, in minutes. If the agent starts the scheduled activity within this threshold, the shift segment activity is in adherence.</p> |
| <code>Category</code> | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description A category for the type of shift segment. Possible values are:</p> <ul style="list-style-type: none"> • <code>Break</code>—Break times, such as a coffee or lunch break. • <code>NonWork</code>—Non-working activities, such as training or meetings. • <code>Work</code>—Work activities, such as answering calls, responding to chats, or handling cases. |
| <code>Color</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Sets a background color when shift activities of this type are displayed in the UI. Use a 3- or 6-digit hexadecimal format, for example <code>#FF00FF</code>.</p> |

| Field | Details |
|---------------|--|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name. This field is automatically generated, but you can supply your own value if you create the record using the API.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record. If no <code>DeveloperName</code> is specified, performance may slow while Salesforce generates one for each record.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata type in Metadata API. The full name can include a namespace prefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates if the shift segment type is active (<code>true</code>) or not (<code>false</code>). The default value is <code>true</code>.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the shift segment type.</p> |

| Field | Details |
|-----------------|---|
| | Possible values are the languages that Workforce Engagement supports. |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> <p>Description The label of the shift segment type.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. |

| Field | Details |
|-------|--|
| | <ul style="list-style-type: none">In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |

SiteDetail

Represents the details of a Salesforce site or Experience Cloud site. Available in API version 38.0 and later.

Supported Calls


`describeSObjects()`, `query()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|------------------------------------|--|
| <code>DurableId</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the Site object.</p> |
| <code>IsRegistrationEnabled</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether the site allows users to sign up.</p> |
| <code>SecureUrl</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The URL of the website.</p> |

 **Note:** SiteDetail fields are exposed in SOAP API version 45.0 and later. You can use Tooling API to query for SiteDetail fields in guest user mode in API version 44.0 and earlier. In API version 45.0 and later, use SOAP API to get this data in guest user mode. SiteDetail is still exposed in Tooling API to User Profiles with the ViewSetup permission.

SOQLResult

A complex type that represents the result of a SOQL query in an ApexExecutionOverlayResult object. Available from API version 28.0 or later.

Fields

| Field | Details |
|---------------|--|
| queryError | Type string Description The error text returned if the execution was unsuccessful. |
| queryMetadata | Type QueryResultMetadata Description The structured result returned from a successful execution. QueryResultMetadata includes the following fields: <ul style="list-style-type: none">columnMetadataentityNamegroupByidSelectedkeyPrefix |
| queryResult | Type array of MapValue Description MapValue contains an array of MapEntry, which contains the following fields: <ul style="list-style-type: none">keyDisplayValuevalue (reference to StateValue) |

Usage

Overlay SOQL on checkpoints to capture structured debugging information. If your SOQL query may return more than one record when dealing with complex types, select only one row. For example, you can use a LIMIT=1 clause in your SOQL query, or you can list rows for the user and have them select the row to inspect.

SourceMember

Represents a single sObject of all source that you are tracking in an org. Examples of SourceMembers include Apex classes, custom objects, permission sets, and custom applications. Salesforce uses SourceMember objects to track what has changed in your org. Available in Tooling API version 41.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

To access SourceMember, turn on Enable Source Tracking in Developer and Developer Pro Sandboxes in the production Dev Hub org. Once turned on, SourceMember appears in sandbox orgs after refresh. Scratch orgs automatically have the SourceMember object.

Fields

| Field | Details |
|----------------|--|
| ChangedBy | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description Specifies the username of the user who caused the change that generated a new source member row.</p> |
| IsNameObsolete | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description If <code>true</code>, the sObject that this SourceMember represents has been deleted. Salesforce never deletes SourceMember objects, even if you delete the sObject that it represents. Salesforce instead marks the SourceMember object as obsolete by setting this field to <code>true</code>. The default value is <code>false</code>.</p> |
| IsNewMember | <p>Type boolean</p> |

| Field | Details |
|-----------------|---|
| | <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Indicates whether the sObject represents an addition, such as a new custom object or Apex class, to the org (<code>true</code>) or a change to an existing entity (<code>false</code>). Available in API version 50.0 and later. The default value is <code>false</code>.</p> |
| MemberIdOrName | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The unique ID or name of the sObject that this SourceMember represents. For standard objects, such as Account, Contact, and Opportunity, this field is set to the name. For all other objects, this field is set to the ID.</p> |
| MemberName | <p>Type string</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description The API name of the sObject that this SourceMember represents.</p> |
| MemberType | <p>Type string</p> <p>Properties Create, Filter, Group, idLookup, Sort, Update</p> <p>Description The type of the sObject that this SourceMember represents.</p> |
| RevisionCounter | <p>Type int</p> <p>Description The revision number of the sObject that this SourceMember represents. Available in API version 47.0 and later. Salesforce uses the revision number to determine which entities have changed in the org. When you change an entity in your org, Salesforce updates the <code>RevisionCounter</code> field of its associated SourceMember with a value based on an internal revision counter. The counter does not reset when source is pushed to an org.</p> |
| RevisionNum | <p>Type int</p> |

| Field | Details |
|-------|---|
| | Properties Create, Filter, Group, Nillable, Sort, Update |
| | Description Deprecated in API version 47.0 and later. Use <code>RevisionCounter</code> instead. The revision number of the sObject that this SourceMember represents. Salesforce uses the revision number to determine which entities have changed in the org. When you change an entity in your org, Salesforce updates the <code>RevisionNum</code> field of its associated SourceMember with a value based on an internal revision counter. |

SourceMemberDeployRequest

Reserved for internal use.

StandardAction

Represents the buttons, links, and actions (standard actions) for a standard or custom object. This object is available in API version 34.0 and later.

You can view the standard actions from an object's management settings by going to Buttons, Links, and Actions.

Supported SOAP Calls

`query()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|-------------|--|
| ContentType | Type string |
| | Properties Filter, Group, Restricted picklist, Sort |
| | Description Indicates whether the button or link is standard, URL, s-control, JavaScript action, or Visualforce page. This value maps to the <code>ContentSource</code> field in the user interface. |

| Field | Details |
|--------------------|--|
| Description | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Text displayed to an administrator in the standard action setup page. <code>Description</code> can be different from the <code>Label</code>, which is the label displayed in the user interface to end users. It can also be different from <code>Name</code>, which is a unique string used in merge fields.</p> |
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. <code>DurableId</code> in queries allows you to find the right record without having to retrieve the entire record.</p> |
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The ID of the standard or custom object for which this standard action is defined.</p> |
| IsOverridden | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether this standard action has been overridden (<code>true</code>, or not.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The text that displays in a user interface for the standard action.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> |

| Field | Details |
|-------------------|--|
| | <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Name | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name for the button or link when referenced from a merge field. This name can contain only underscores and alphanumeric characters, and must be unique in your organization. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores.</p> |
| OverrideContentId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of an <code>OverrideContent</code> record.</p> |



Note: StandardAction fields are exposed in SOAP API version 45.0 and later. You can use Tooling API to query for StandardAction fields in guest user mode in API version 44.0 and earlier. In API version 45.0 and later, use SOAP API to get this data in guest user mode. StandardAction is still exposed in Tooling API to User Profiles with the ViewSetup permission.

StaticResource

Represents the working copy of a static resource file for editing or saving. Static resources allow you to upload content that you can reference in a Visualforce page, including images, stylesheets, JavaScript, and other files. Available in Tooling API version 29.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|-----------------|---|
| Body | Type string Properties Create, Update Description The data for the static resource file. |
| ContentType | Type string Properties Create, Update Description Required. The content type of the file, for example text/plain. |
| CacheControl | Type string Properties Create, Update Description Required. Indicates whether the static resource is marked with a public caching tag so that a third-party delivery client can cache the content. The valid values are: <ul style="list-style-type: none">• Private• Public |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort |

| Field Name | Details |
|------------|--|
| | Description Indicates the manageable state of the specified component that is contained in a package: <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Name | Type string Properties Create, Update Description The static resource name. The name can only contain characters, letters, and the underscore (_) character, must start with a letter, and cannot end with an underscore or contain two consecutive underscore characters |

Usage

To create, edit, or save a static resource file, create a StaticResource object that references it.

SubscriberPackage

Represents an installable package (first- or second-generation) across all Salesforce instances. Available in API version 41.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

GET, Query

Fields

| Field | Details |
|-----------------|---|
| Description | Type string Properties Nillable, Sort Description Description of the package. |
| IsPackageValid | Type boolean Properties Defaulted on create, Group, Sort Description Indicates whether the package metadata is available consistently across all Salesforce instances. If this value is <code>false</code> , the package is unavailable for installation. |
| Name | Type string Properties Group, idLookup, Sort Description Name of the package. |
| NamespacePrefix | Type string Properties Group, idLookup, Nillable, Sort Description Namespace prefix that identifies the components of your package in the subscriber's org. |

Usage

Represents a package that can be installed. To query this object, include an ID (begins with 033) in your SOQL WHERE clause.

SubscriberPackageVersion

Represents a package version (first- or second-generation) across all Salesforce instances. Available in API version 41.0 and later.

Supported SOAP Calls

`describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

`GET`, `Query`

Fields

| Field | Details |
|---------------------------------------|---|
| <code>AppExchangeDescription</code> | <p>Type string</p> <p>Properties Nillable, Sort</p> <p>Description The AppExchange description for this package. If the AppExchange listing for the package doesn't contain a value for this field, the field's value is <code>null</code>.</p> |
| <code>AppExchangeLogoUrl</code> | <p>Type string</p> <p>Properties Nillable, Sort</p> <p>Description The URL that AppExchange uses to display the logo for this package. If the AppExchange listing for the package doesn't contain a value for this field, the field's value is <code>null</code>.</p> |
| <code>AppExchangePackageName</code> | <p>Type string</p> <p>Properties Group, Nillable, Sort</p> <p>Description The AppExchange name for this package. If the AppExchange listing for the package doesn't contain a value for this field, the field's value is <code>null</code>.</p> |
| <code>AppExchangePublisherName</code> | <p>Type string</p> <p>Properties Group, Nillable, Sort</p> |

| Field | Details |
|-----------------|--|
| | <p>Description</p> <p>The AppExchange publisher name for this package.</p> <p>If the AppExchange listing for the package doesn't contain a value for this field, the field's value is <code>null</code>.</p> |
| BuildNumber | <p>Type</p> <p>int</p> <p>Properties</p> <p>Group, Nillable, Sort</p> <p>Description</p> <p>Part of the version number of a package version. The complete version number format is <i>major.minor.patch.build</i>—for example, in <code>1.2.0.5</code> the build number is <code>5</code>.</p> |
| CspTrustedSites | <p>Type</p> <p>SubscriberPackageCspTrustedSites</p> <p>Properties</p> <p>Nillable</p> <p>Description</p> <p>List of new Trusted URLs (CspTrustedSite) that the user must authorize before installing the package version. Package upgrades don't include previously installed Trusted URLs.</p> |
| Dependencies | <p>Type</p> <p>SubscriberPackageDependencies</p> <p>Properties</p> <p>Nillable</p> <p>Description</p> <p>Other subscriber package versions that this subscriber package version depends on.</p> <p>Available in API version 44.0 and later.</p> |
| Description | <p>Type</p> <p>string</p> <p>Properties</p> <p>Nillable, Sort</p> <p>Description</p> <p>Description of the package.</p> |
| InstallationKey | <p>Type</p> <p>RAW</p> <p>Properties</p> <p>Not applicable</p> |

| Field | Details |
|-------------------------|--|
| | <p>Description</p> <p>Installation key for a key-protected package.</p> <p>This field is hidden. It's not queryable, but you can include it in the <code>WHERE</code> clause of SOQL queries. In some queries, it's required.</p> <p>To query unlocked packages that have installation keys, you must include the correct <code>InstallationKey</code> value in your <code>WHERE</code> clause. However, if the unlocked package version is already installed in your org you can query it without specifying an <code>InstallationKey</code> value.</p> <p>For managed packages, an <code>InstallationKey</code> value in the <code>WHERE</code> clause is optional.</p> |
| InstallValidationStatus | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Status of the validation tests that are run during the package version install. Valid values are:</p> <ul style="list-style-type: none"> • NoErrorsDetected • BetaInstallIntoProductionOrg • CannotInstallEarlierVersion • CannotUpgradeBeta • CannotUpgradeUnmanaged • DeprecatedInstallPackage • ExtensionsOnLocalPackages • PackageNotInstalled • PackageHasInDevExtensions • InstallIntoDevOrg • NoAccess • PackagingDisabled • PackagingNoAccess • PackageUnavailable • UninstallInProgress • UnknownError • NamespaceCollision |
| IsBeta | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Group, Sort</p> <p>Description</p> <p>Indicates whether the package version is released (<code>false</code>).</p> |

| Field | Details |
|---------------------|---|
| IsDeprecated | <p>Type boolean</p> <p>Properties Defaulted on create, Group, Sort</p> <p>Description Specifies whether this package version has been marked as deprecated (<code>true</code>) or not (<code>false</code>).</p> |
| IsManaged | <p>Type boolean</p> <p>Properties Defaulted on create, Group, Sort</p> <p>Description Specifies whether this package is managed (<code>true</code>) or not (<code>false</code>).</p> |
| IsPasswordProtected | <p>Type boolean</p> <p>Properties Defaulted on create, Group, Sort</p> <p>Description Specifies whether installation of this package version requires the user to provide an installation key (<code>true</code>) or not (<code>false</code>).</p> |
| IsSecurityReviewed | <p>Type boolean</p> <p>Properties Defaulted on create, Group, Sort</p> <p>Description Specifies whether the package has passed the security review required for publishing in AppExchange.</p> |
| MajorVersion | <p>Type int</p> <p>Properties Group, Nillable, Sort</p> <p>Description Part of the version number of a package version. The complete version number format is <i>major.minor.patch.build</i>—for example, in <code>1.2.0.5</code> the major version is <code>1</code>.</p> |
| MinorVersion | <p>Type int</p> |

| Field | Details |
|--------------------------|--|
| | <p>Properties Group, Nillable, Sort</p> <p>Description Part of the version number of a package version. The complete version number format is <i>major.minor.patch.build</i>—for example, in 1.2.0.5 the minor version is 2.</p> |
| Name | <p>Type string</p> <p>Properties Group, idLookup, Sort</p> <p>Description Name of the package.</p> |
| Package2ContainerOptions | <p>Type picklist</p> <p>Properties Group, Nillable, Restricted picklist, Sort</p> <p>Description Container options for the second-generation package. These options determine the upgrade and editability rules. Valid values are:</p> <ul style="list-style-type: none"> • Managed • Unlocked |
| PatchVersion | <p>Type int</p> <p>Properties Group, Nillable, Sort</p> <p>Description Part of the version number of a package version. The complete version number format is <i>major.minor.patch.build</i>—for example, in 1.2.0.5 the patch version is 0.</p> |
| PostInstallUrl | <p>Type string</p> <p>Properties Nillable, Sort</p> <p>Description The fully qualified URL of the post-installation instructions. Instructions are shown as a link after installation and are available from the package detail view.</p> |

| Field | Details |
|---------------------|---|
| Profiles | Type SubscriberPackageProfiles Properties Nillable Description List of profiles for which the package was installed. |
| PublisherName | Type string Properties Group, Nillable, Sort Description The name of the publisher of this package. |
| ReleaseNotesUrl | Type string Properties Nillable, Sort Description The fully qualified URL of the package release notes. Release notes are shown as a link during the installation process and are available from the package detail view after installation. |
| ReleaseState | Type picklist Properties Group, Nillable, Restricted picklist, Sort Description If the package version is a beta version, the value is <code>Beta</code> . Otherwise, the value is <code>Released</code> . |
| RemoteSiteSettings | Type SubscriberPackageRemoteSiteSettings Properties Nillable Description List of new Remote Site Settings that the user must authorize before installing the package. Package upgrades don't include previously installed Remote Site Settings. |
| SubscriberPackageId | Type ID Properties Group, Nillable, Sort |

| Field | Details |
|----------------|---|
| | Description ID of the parent SubscriberPackage. The ID starts with the string 033. This value is case-sensitive and must be unique. |
| IsOrgDependent | Type boolean Properties Defaulted on create, Group, Sort Description Indicates whether the package depends on unpackaged metadata in the installation org (<code>true</code>) or not (<code>false</code>). This field applies to unlocked packages only. The default value is <code>false</code> . Available in API version 49.0 and later. |

SubscriberPackageCspTrustedSites

Represents the list of new Trusted URLs that the user must authorize before installing the package version. Available in API version 41.0 and later. In API version 58.

| Field | Details |
|----------|---|
| settings | Type SubscriberPackageCspTrustedSite Description List of Trusted URLs (CspTrustedSite) that have been added to the package. These sites must be authorized before installation. If the AppExchange listing for the package doesn't contain a value for this field, the field's value is <code>null</code> . |

SubscriberPackageCspTrustedSite

Represents a new Trusted URLs ([CspTrustedSite](#)) that the user must authorize before installing the package version. Available in API version 41.0 and later.

| Field | Details |
|-------------|---|
| endpointUrl | Type string Description The URL associated with the CspTrustedSite . |

SubscriberPackageDependencies

Represents a list of subscriber package version IDs that a subscriber package version depends on. Available in API version 44.0 and later.

| Field | Details |
|-------|---|
| ids | Type SubscriberPackageDependency Description List of SubscriberPackageDependency IDs: 04t IDs for the package versions that a subscriber package version depends on. |

SubscriberPackageProfiles

Represents a mapping between the profiles contained in the package and the profiles that are applied in the target subscriber org. Available in API version 41.0 and later.

| Field | Details |
|---------------------|---|
| destinationProfiles | Type SubscriberPackageDestinationProfile Description The profiles that the administrator installing the package in a target subscriber org actually applies. |
| sourceProfiles | Type SubscriberPackageSourceProfile Description The profiles that are contained in the package that is being installed. |

SubscriberPackageDestinationProfile

Represents the profile that an administrator applies when installing the package in a target subscriber org. Available in API version 41.0 and later.

| Field | Details |
|-------------|--|
| description | Type string Description The description of the profile. |
| displayName | Type string |

| Field | Details |
|-----------|---|
| | Description The display name of this profile. |
| name | Type string Description The name of the profile. |
| noAccess | Type boolean Description Returns <code>true</code> if the profile is internal. |
| profileId | Type string Description The ID of the profile. |
| type | Type string Description The API name of the profile. |

SubscriberPackageSourceProfile

Represents a profile contained in the package to be installed. Available in API version 41.0 and later.

| Field | Details |
|-------|---|
| label | Type string Description The profile label. |
| value | Type string Description The name of the profile. |

SubscriberPackageRemoteSiteSettings

Represents a list of Remote Site Settings (RSS) that have been added to the package since the last version. Available in API version 41.0 and later.

| Field | Details |
|----------|---|
| settings | Type SubscriberPackageRemoteSiteSettingSubscriberPackageRemoteSiteSetting Description List of RSS added to the package since the last version. |

SubscriberPackageRemoteSiteSetting

Defines a URL to an external service. The administrator of the subscriber org must authorize access to these services. Available in API version 41.0 and later.

| Field | Details |
|--------|--|
| secure | Type boolean Description Returns <code>true</code> if the URL uses the <code>https</code> protocol. Applies only if protocol security is enabled. |
| url | Type string Description The URL of the remote service. |

Usage

Represents a version of an installable package. To query this object, include an ID (begins with 04t) in your SOQL `WHERE` clause.

For subscriber package versions with no installation keys, queries must include an ID value, but an `InstallationKey` value is not required.

```
SELECT Dependencies FROM SubscriberPackageVersion
WHERE ID = '04txxxxxxxxxxxxx'
```

For unlocked package versions that have installation keys, queries must include both an ID value and an `InstallationKey` value.

```
SELECT Dependencies FROM SubscriberPackageVersion
WHERE ID = '04txxxxxxxxxxxxx' AND InstallationKey='password123'
```

For managed first- and second-generation package versions that have installation keys and for unlocked package versions that are installed in your org, queries must include an ID value, but an `InstallationKey` value is optional.

```
SELECT Dependencies FROM SubscriberPackageVersion
WHERE ID = '04txxxxxxxxxxxxx'
```

```
SELECT Dependencies FROM SubscriberPackageVersion
WHERE ID = '04txxxxxxxxxxxxx' AND InstallationKey='password123'
```

SubscriberPackageVersionUninstallRequest

Represents a request to uninstall a `Package2Version` (second-generation package version). Available in API version 41.0 and later.

Supported SOAP Calls

`create()`, `describeSObjects()`, `query()`, `retrieve()`

Supported REST HTTP Methods

GET, POST, Query

Fields

| Field | Details |
|----------------------------|--|
| Status | Type picklist Properties Group, Nillable, Restricted picklist, Sort Description The status of the uninstall. Valid values are: <ul style="list-style-type: none">ErrorInProgressQueuedSuccess |
| SubscriberPackageVersionId | Type ID Properties Create, Filter, Group, Sort Description The ID of the subscriber <code>Package2</code> version to uninstall. The ID starts with the string <code>04t</code> . |

SvcCatalogCategory

Represents the grouping of individual catalog items in Service Catalog. This object is available in API version 53.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules

Available to customers with Employee Productivity Plus or IT Service Center add-ons.

Fields

| Field | Details |
|---------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Developer name for this category.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the category. This name has the following requirements:</p> <ul style="list-style-type: none">• It must be unique across the org.• It must contain only alphanumeric characters and underscores.• It must begin with a letter.• It must not include spaces.• It must not end with an underscore.• It must not contain two consecutive underscores. <p>Query this field only if the query result contains up to one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|-----------------|---|
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates if a catalog category is active. The default value is 'false'.</p> |
| ManageableState | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Describes the manageable state of a category that is contained in a package. Possible values are:</p> <ul style="list-style-type: none"> • beta—Managed-Beta • deleted—Managed-Proposed-Deleted • deprecated—Managed-Proposed-Deprecated • deprecatedEditable—SecondGen-Installed-Deprecated • installed—Managed-Installed • installedEditable—SecondGen-Installed-Editable • released—Managed-Released • unmanaged—Unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The primary label for the catalog category record.</p> |
| Metadata | <p>Type complexvalue</p> <p>Properties Create, Nillable, Update</p> <p>Description The category's metadata. Query this field only if the query result contains up to one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|------------------|---|
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace associated with this category.</p> |
| ParentCategoryId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description If provided, the name of another SvcCatalogCategory that this category appears under. The parent category in this field can't have its own parent category. Categories can't have more than one level of nesting. This is a relationship field.</p> <p>Relationship Name ParentCategory</p> <p>Relationship Type Lookup</p> <p>Refers To SvcCatalogCategory</p> |
| SortOrder | <p>Type int</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Displays a set order for catalog category entities.</p> |

SvcCatalogCategoryItem

Represents the assignment of this service to a category within the Service Catalog. This object is available in API version 53.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules

Available to customers with Employee Productivity Plus or IT Service Center add-ons.

Fields

| Field | Details |
|----------------------|--|
| IsPrimaryCategory | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Determines if the catalog category (<code>SvcCatalogCategory</code>) is the primary category for this catalog item. Each <code>SvcCatalogItemDef</code> component can only have one category with this attribute set to <code>true</code>. The default value is 'false'.</p> |
| SortOrder | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The position of the catalog item relative to other catalog items in the catalog category.</p> |
| SvcCatalogCategoryId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The catalog category that the catalog item is assigned to. This is a relationship field.</p> <p>Relationship Name <code>SvcCatalogCategory</code></p> <p>Relationship Type Lookup</p> <p>Refers To <code>SvcCatalogCategory</code></p> |

| Field | Details |
|---------------------|--|
| SvcCatalogItemDefId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description Reference to the SvcCatalogItemDef. This is a relationship field.</p> <p>Relationship Name SvcCatalogItemDef</p> <p>Relationship Type Lookup</p> <p>Refers To SvcCatalogItemDef</p> |

SvcCatalogFulfillFlowItem

Represents a variable in a fulfillment flow for Service Catalog that can accept input. This object is available in API version 53.0 through 56.0.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

DELETE, GET, HEAD, PATCH, POST, Query

Special Access Rules

Available to customers with Employee Productivity Plus or IT Service Center add-ons.

Fields

| Field | Details |
|----------------------|---|
| CatalogFulfillmentId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> |

| Field | Details |
|----------------------|--|
| | <p>Description Id of the SvcCatalogFulfillmentFlow that this item belongs to. This is a relationship field.</p> <p>Relationship Name CatalogFulfillment</p> <p>Relationship Type Lookup</p> <p>Refers To SvcCatalogFulfillmentFlow</p> |
| CatalogInputVariable | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The FlowVariable the fulfillment flow property represents.</p> |
| DisplayType | <p>Type picklist</p> <p>Properties Create, Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The display options available. Possible values are:</p> <ul style="list-style-type: none"> • Checkbox • Lookup • Number • Picklist • Text <p>The default value is 'Lookup'.</p> |
| FieldDefinition | <p>Type picklist</p> <p>Properties Create, Filter, Group, Nillable, Restricted picklist, Sort, Update</p> <p>Description The name of a field in the object provided in <code>ObjectLookupDomainId</code> that specifies the value for this variable. If <code>DisplayType</code> is <code>Picklist</code>, this value must be the name of a picklist field. If <code>DisplayType</code> is <code>Lookup</code> and <code>FieldLookupDomainId</code> is <code>FieldDefinition</code>, this value must be the name of a relationship field. This value can be a field from a standard or custom object.</p> |

| Field | Details |
|------------------------------------|---|
| FieldLookupDomainId | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The name of a standard or custom object that specifies the domain of that lookup or picklist. This value is relevant only if displayType is <code>Lookup</code> or <code>Picklist</code>. This is a relationship field.</p> <p>Relationship Name FieldLookupDomain</p> <p>Relationship Type Lookup</p> <p>Refers To EntityDefinition</p> |
| IsAdditionalQuestionsInputVariable | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Determines if this variable accepts input for all additional questions that were asked to a user. This value can only be <code>true</code> if the <code>DisplayType</code> for this item is <code>Text</code>. Only one item per SvcCatalogFulfillmentFlow component can set this attribute to <code>true</code>. The default value is 'false'.</p> |
| IsRequired | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description Determines if the field is required for the related fulfillment flow to be executed. The default value is 'false'.</p> |
| LookupDomainFieldType | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description This value specifies the fields for the object specified by <code>ObjectLookupDomainId</code> that are displayed in the Catalog Builder by type. This value is only relevant if <code>DisplayType</code> is <code>Lookup</code> and <code>fieldLookupDomain</code> is <code>FieldDefinition</code>.</p> |

| Field | Details |
|----------------------|--|
| MasterLabel | Type string Properties Create, Filter, Group, Sort, Update Description The primary label for the fulfillment flow record. |
| ObjectLookupDomainId | Type string Properties Create, Filter, Group, Nillable, Sort, Update Description The name of a custom or standard object. If <code>DisplayType</code> is <code>Lookup</code> or <code>Picklist</code> , this value filters the available options to a specific object. This is a relationship field. Relationship Name ObjectLookupDomain Relationship Type Lookup Refers To EntityDefinition |

SvcCatalogFulfillmentFlow

Represents the flow associated with a specific catalog item in the Service Catalog. This object is available in API version 53.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

Available to customers with Employee Productivity Plus or IT Service Center add-ons.

Fields

| Field | Details |
|---------------|--|
| Description | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description Free-text description of the fulfillment flow.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Developer name for this fulfillment flow.</p> |
| FlowId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The flow represented by this SvcCatalogFulfillmentFlow. This is a relationship field.</p> <p>Relationship Name Flow</p> <p>Relationship Type Lookup</p> <p>Refers To FlowDefinition</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the fulfillment flow. This name has the following requirements:</p> <ul style="list-style-type: none">• It must be unique across the org.• It must contain only alphanumeric characters and underscores.• It must begin with a letter.• It must not include spaces. |

| Field | Details |
|-----------------|---|
| | <ul style="list-style-type: none"> It must not end with an underscore. It must not contain two consecutive underscores. <p>Query this field only if the query result contains up to one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Icon | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Reserved for future use.</p> |
| ManageableState | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Describes the manageable state of a fulfillment flow that is contained in a package. Possible values are:</p> <ul style="list-style-type: none"> beta—Managed-Beta deleted—Managed-Proposed-Deleted deprecated—Managed-Proposed-Deprecated deprecatedEditable—SecondGen-Installed-Deprecated installed—Managed-Installed installedEditable—SecondGen-Installed-Editable released—Managed-Released unmanaged—Unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The primary label for the fulfillment flow record.</p> |
| Metadata | <p>Type complexvalue</p> <p>Properties Create, Nillable, Update</p> |

| Field | Details |
|-----------------|---|
| | Description The fulfillment flow's metadata. Query this field only if the query result contains up to one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description The namespace associated with this fulfillment flow. |

SvcCatalogItemDef

Represents the grouping of individual catalog items in Service Catalog. This object is available in API version 53.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

Available to customers with Employee Productivity Plus or IT Service Center add-ons.

Fields

| Field | Details |
|-------------|--|
| Description | Type textarea Properties Nillable Description Free-text description of the catalog item. |

| Field | Details |
|-------------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Developer name for this catalog item.</p> |
| FlowId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The screen flow associated with the catalog item. This is a relationship field.</p> <p>Relationship Name Flow</p> <p>Relationship Type Lookup</p> <p>Refers To FlowDefinition</p> |
| FulfillmentFlowId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description This field is a relationship field.</p> <p>Relationship Name FulfillmentFlow</p> <p>Relationship Type Lookup</p> <p>Refers To SvcCatalogFulfillmentFlow</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the catalog item. This name has the following requirements:</p> <ul style="list-style-type: none">• It must be unique across the org. |

| Field | Details |
|---------------|---|
| | <ul style="list-style-type: none"> It must contain only alphanumeric characters and underscores. It must begin with a letter. It must not include spaces. It must not end with an underscore. It must not contain two consecutive underscores. <p>Query this field only if the query result contains up to one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| InternalNotes | <p>Type textarea</p> <p>Properties Nillable</p> <p>Description Describes what the catalog item does and its implementation. This value is meant for other catalog builders.</p> |
| IsFeatured | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Determines if the catalog item is part of the featured catalog items. The default value is 'false'.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted Picklist, Sort</p> <p>Description Possible values are:</p> <ul style="list-style-type: none"> da - Danish de - German en_US - English es - Spanish es_MX - Spanish (Mexico) fi - Finnish fr - French it - Italian ja - Japanese |

| Field | Details |
|-----------------|---|
| | <ul style="list-style-type: none"> ko - Korean nl_NL - Dutch no - Norwegian pt_BR - Portuguese (Brazil) ru - Russian sv - Swedish th - Thai zh_CN - Chinese (Simplified) zh_TW - Chinese (Traditional) |
| ManageableState | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Describes the manageable state of a catalog item that is contained in a package. Possible values are:</p> <ul style="list-style-type: none"> beta—Managed-Beta deleted—Managed-Proposed-Deleted deprecated—Managed-Proposed-Deprecated deprecatedEditable—SecondGen-Installed-Deprecated installed—Managed-Installed installedEditable—SecondGen-Installed-Editable released—Managed-Released unmanaged—Unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The primary label for the catalog item record.</p> |
| Metadata | <p>Type complexvalue</p> <p>Properties Create, Nillable, Update</p> |

| Field | Details |
|-----------------|---|
| | Description The catalog item's metadata. Query this field only if the query result contains up to one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description The namespace associated with this catalog item. |
| Status | Type picklist Properties Defaulted on create, Filter, Group, Restricted picklist, Sort Description Displays the publishing status of a catalog item. Possible values are: <ul style="list-style-type: none"> • Deprecated • Draft • PendingChanges • Published The default value is 'Draft'. |

SymbolTable

A complex type that represents all user-defined tokens in the `Body` of an `ApexClass`, `ApexClassMember`, or `ApexTriggerMember` and their associated line and column locations within the `Body`.

Fields

| Field | Details |
|--------------|---|
| constructors | Type array of Constructor Description Contains the position, scope, and signature of constructors for the Apex class. Apex triggers don't have constructors. Constructor includes the following fields: |

| Field | Details |
|---------------------------------|---|
| | <ul style="list-style-type: none"> • <code>annotations</code> • <code>location</code> • <code>modifiers</code> • <code>name</code> • <code>references</code> • <code>visibility</code> (available only in API versions 33.0 and earlier; scope: Global, Public, or Private) • <code>parameters</code> |
| <code>externalReferences</code> | <p>Type array of ExternalReference</p> <p>Description Contains the name, namespace, external class, method, and variable references for the Apex class or trigger. These references can be used for symbol highlighting or code navigation. ExternalReference includes the following fields:</p> <ul style="list-style-type: none"> • <code>methods</code> • <code>name</code> • <code>namespace</code> • <code>references</code> • <code>variables</code> |
| <code>innerClasses</code> | <p>Type array of SymbolTable</p> <p>Description Contains a symbol table for each inner class of the Apex class or trigger.</p> |
| <code>interfaces</code> | <p>Type array of String</p> <p>Description Contains a set of strings for each interface with the namespace and name, for example: <code>['System.Batchable', 'MyNamespace.MyInterface']</code>.</p> |
| <code>methods</code> | <p>Type array of Method</p> <p>Description Contains the position, name, scope, signature, and return type of available Apex methods. Method includes the following fields:</p> <ul style="list-style-type: none"> • <code>annotations</code> • <code>location</code> • <code>modifiers</code> |

| Field | Details |
|-------------------------------|--|
| | <ul style="list-style-type: none"> • <code>name</code> • <code>references</code> • <code>visibility</code> (available only in API versions 33.0 and earlier; scope: Global, Public, or Private) • <code>parameters</code> • <code>returnType</code> |
| <code>name</code> | <p>Type string</p> <p>Description The name of the Apex class or trigger.</p> |
| <code>namespace</code> | <p>Type string</p> <p>Description The namespace of the Apex class or trigger. Null if there is no namespace.</p> |
| <code>parentClass</code> | <p>Type string</p> <p>Description Returns parents of inner classes and extending classes.</p> |
| <code>properties</code> | <p>Type array of VisibilitySymbol</p> <p>Description Contains the position, name, scope, and references of properties for the Apex class or trigger. VisibilitySymbol includes the following fields:</p> <ul style="list-style-type: none"> • annotations • <code>location</code> • modifiers • <code>name</code> • <code>references</code> • <code>visibility</code> (available only in API versions 33.0 and earlier; scope: Global, Public, or Private) |
| <code>tableDeclaration</code> | <p>Type array of Symbol</p> <p>Description Contains the position, name, and references of the Apex class or trigger. Symbol includes the following fields:</p> <ul style="list-style-type: none"> • annotations |

| Field | Details |
|-----------|---|
| | <ul style="list-style-type: none">• location• <code>modifiers</code>• name• references |
| variables | <p>Type array of Symbol</p> <p>Description Contains the position, name, and references of related variables. Symbol includes the following fields:</p> <ul style="list-style-type: none">• <code>annotations</code>• location• <code>modifiers</code>• name• references |

Annotations

Available values for annotations fields include:

- Deprecated
- Future
- HttpDelete
- HttpGet
- HttpPatch
- HttpPost
- HttpPut
- InvocableMethod
- InvocableVariable
- IsTest
- ReadOnly
- RemoteAction
- TestSetup
- TestVisible
- RestResource

Modifiers

Modifiers can include more values than those values explicitly specified in classes and methods. All relevant modifiers, including implicit ones, are now returned. For example, all `webservice` methods have an implicit `global` modifier. Also, because fields and methods are private unless otherwise specified, the `private` modifier is returned by default.

The `testMethod` modifier is returned when either the `testMethod` modifier or the `IsTest` annotation is used.

Available values for `modifiers` fields include:

- `abstract`
- `final`
- `global`
- `override`
- `private`
- `protected`
- `public`
- `static`
- `testMethod`
- `transient`
- `virtual`
- `webservice`
- `with sharing`
- `without sharing`

Usage

Use symbol tables instead of building a parser or compiler. Symbol tables allow you to do symbol highlighting, code navigation, code completion, symbol searches, and more.

A symbol table can't be created if the content referenced by the `ContentEntityId` field doesn't use a symbol table. Compiler errors for the last deployment of the [MetadataContainer](#) in the `MetadataContainerId` field also prevent a symbol table from being created.

TabDefinition

Represents a tab, and returns all tabs available in the org. Available in API version 43.0 and later.



Note: In API version 45.0 and later, only users with the "ViewSetup and Configuration" permission can access `TabDefinition`.

Supported SOAP Calls

`query()`, `search()`

Supported REST HTTP Methods

`Query`, `GET`

Fields

| Field Name | Details |
|------------------------|---|
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| IsAvailableInAloha | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Set to <code>true</code> if the tab is available in the Salesforce Classic user interface. If a tab is available in Salesforce Classic, then <code>IsAvailableInMobile</code> is <code>false</code>.</p> |
| IsAvailableInDesktop | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Set to <code>true</code> if the tab is available in the desktop user interface.</p> |
| IsAvailableInMobile | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Set to <code>true</code> if the tab is available in the Salesforce mobile app.</p> |
| IsAvailableInLightning | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Set to <code>true</code> if the tab is available in the Lightning Experience user interface.</p> |
| IsCustom | <p>Type boolean</p> |

| Field Name | Details |
|-------------|---|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Set to <code>true</code> if the tab is a custom tab.</p> |
| Label | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The tab label in the Salesforce org.</p> |
| MobileUrl | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description If the tab is available in mobile, this is the URL that the tab directs the user to in the Salesforce mobile app. If the tab isn't available in mobile, this is set to null.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of the tab.</p> |
| SubjectName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Used with REST to retrieve the metadata for the tab.</p> |
| Url | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The URL for where the tab directs the user.</p> |

TestSuiteMembership

Associates an Apex class with an ApexTestSuite. Available in Tooling API version 36.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Description |
|-----------------|---|
| ApexClassId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The Apex class whose tests are to be executed. This is a relationship field.</p> <p>Relationship Name ApexClass</p> <p>Relationship Type Lookup</p> <p>Refers To ApexClass</p> |
| ApexTestSuiteId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The test suite to which the Apex class is assigned. This is a relationship field.</p> <p>Relationship Name ApexTestSuite</p> <p>Relationship Type Lookup</p> |

| Field Name | Description |
|------------|-----------------------------------|
| | Refers To ApexTestSuite |

Usage

Insert a TestSuiteMembership object using an API call to associate an Apex class with an ApexTestSuite object. (ApexTestSuite and TestSuiteMembership aren't editable through Apex DML.) To remove the class from the test suite, delete the TestSuiteMembership object. If you delete an Apex test class or test suite, all TestSuiteMembership objects that contain that class or suite are deleted.

The following SOQL query returns the membership object that relates this Apex class to this test suite.

```
SELECT Id FROM TestSuiteMembership WHERE ApexClassId = '01pD0000000Fhy9IAC'
AND ApexTestSuiteId = '05FD00000004CDBMA2'
```

TimeSheetTemplate

Represents a template for creating time sheets in Field Service. Available in API version 46.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeLayout()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET, POST, PATCH, DELETE

Special Access Rules

Field Service must be enabled to access TimeSheetTemplate. Users must have the Customize Application and Time Sheet Template permissions.

Limitations

[SOQL Limitations](#) on page 35

Fields

| Field | Details |
|--------|---|
| Active | Type boolean Properties Defaulted On Create, Filter, Group, Sort |

| Field | Details |
|---------------|---|
| | Description Indicates whether the time sheet template is active (<code>true</code>) or not (<code>false</code>). |
| Description | Type textarea Properties Nillable Description The time sheet template's description. |
| DeveloperName | Type string Properties Filter, Group, Sort Description The API name of the time sheet template. Can contain alphanumeric characters and underscores, and must begin with a letter. Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field. |
| Frequency | Type picklist Properties Filter, Group, Restricted picklist, Sort Description Defines the frequency of the time sheet creation period. One of the following values: <ul style="list-style-type: none"> Daily Weekly EveryTwoWeeks TwiceAMonth Monthly |
| Fullname | Type string Properties Create, Group, Nillable Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |

| Field | Details |
|-----------------|---|
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language associated with the time sheet template.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged <p>Available in API version 48.0 and later.</p> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The name of the time sheet template.</p> |
| Metadata | <p>Type mns:TimeSheetTemplate</p> <p>Properties Create, Nillable, Update</p> <p>Description The TimeSheetTemplate metadata.</p> |
| NamespacePrefix | <p>Type string</p> |

| Field | Details |
|------------------------------|---|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace that identifies the package that manages the time sheet template. Available in API version 48.0 and later.</p> |
| StartDate | <p>Type date</p> <p>Properties Filter, Group, Sort</p> <p>Description The date when the time sheet takes effect.</p> |
| TimeSheetTemplateAssignments | <p>Type QueryResult</p> <p>Properties Nillable</p> <p>Description A list of profiles that the template is assigned to. This field is only visible when the template has been assigned to at least one user profile. Available in API version 48.0 and later.</p> |
| WorkWeekEndDay | <p>Type picklist</p> <p>Properties Defaulted On Create, Filter, Group, Restricted picklist, Sort</p> <p>Description The end day of the template's work week. One of the following values:</p> <ul style="list-style-type: none"> Monday Tuesday Wednesday Thursday Friday Saturday Sunday (default) |
| WorkWeekStartDay | <p>Type picklist</p> <p>Properties Defaulted On Create, Filter, Group, Restricted picklist, Sort</p> <p>Description The start day of the template's work week. One of the following values:</p> |

| Field | Details |
|-------|--|
| | <ul style="list-style-type: none">MondayTuesdayWednesdayThursdayFridaySaturdaySunday (default) |

TimeSheetTemplateAssignment

Represents the assignment of a time sheet template to a profile. Available in API version 48.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Special Access Rules

Field Service must be enabled to access TimeSheetTemplateAssignment. Users must have the Customize Application and Time Sheet Template permissions.

Fields

| Field | Details |
|--------------|---|
| AssignedToId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Unique, Update</p> <p>Description The ID of the user profile assigned to the time sheet template.</p> |

| Field | Details |
|---------------------|--|
| TimeSheetTemplateId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Sort, Update</p> <p>Description</p> <p>The ID of the associated time sheet template.</p> |

TraceFlag

Represents a trace flag that triggers an Apex debug log at the specified logging level.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API HTTP Methods

Query, GET, POST, PATCH, DELETE

Fields

| Field Name | Details |
|------------|--|
| ApexCode | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description</p> <p>The log category level for Apex code. Includes information about Apex code. Can also include log messages generated by data manipulation language (DML) statements, inline SOQL or SOSL queries, the start and completion of triggers, the start and completion of test methods, and so on. The following are valid values.</p> <ul style="list-style-type: none">• NONE• ERROR• WARN• INFO• DEBUG• FINE• FINER |

| Field Name | Details |
|---------------|--|
| | <ul style="list-style-type: none">• FINEST <p>This field is required.</p> |
| ApexProfiling | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description</p> <p>The log category level for profiling information. Includes cumulative profiling information, such as the limits for your namespace, the number of emails sent, and so on. The following are valid values.</p> <ul style="list-style-type: none">• NONE• ERROR• WARN• INFO• DEBUG• FINE• FINER• FINEST <p>This field is required.</p> |
| Callout | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description</p> <p>The log category level for callouts. Includes the request-response XML that the server is sending and receiving from an external Web service. The request-response XML is useful when debugging issues related to SOAP API calls. The following are valid values.</p> <ul style="list-style-type: none">• NONE• ERROR• WARN• INFO• DEBUG• FINE• FINER• FINEST <p>This field is required.</p> |

| Field Name | Details |
|----------------|--|
| Database | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category for database activity. Includes information about database activity, including every DML statement or inline SOQL or SOSL query. The following are valid values.</p> <ul style="list-style-type: none"> • NONE • ERROR • WARN • INFO • DEBUG • FINE • FINER • FINEST <p>This field is required.</p> |
| DebugLevelId | <p>Type reference</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The ID of the debug level assigned to this trace flag. A debug level, which is a set of log category levels, can be assigned to multiple trace flags.</p> |
| ExpirationDate | <p>Type dateTime</p> <p>Properties Create, Filter, Sort, Update</p> <p>Description The date and time that the trace flag expires. <code>ExpirationDate</code> must be less than 24 hours after <code>StartDate</code>. Only one trace flag per traced entity can be active at a time. If <code>StartDate</code> is null, the current time is used, and the <code>ExpirationDate</code> must be less than 24 hours from the current time.</p> <p>This field is required.</p> |
| LogType | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort</p> |

| Field Name | Details |
|------------|--|
| | <p>Description</p> <p>The type of log to generate. The following are valid values.</p> <ul style="list-style-type: none"> • CLASS_TRACING • DEVELOPER_LOG • PROFILING (reserved for future use) • USER_DEBUG <p>When you open the Developer Console, it sets a <code>DEVELOPER_LOG</code> trace flag to log your activities. <code>USER_DEBUG</code> trace flags cause logging of an individual user's activities. <code>CLASS_TRACING</code> trace flags override logging levels for Apex classes and triggers, but don't generate logs.</p> <p>This field is required.</p> |
| ScopeId | <p>Type</p> <p>reference</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>Deprecated. This field is available in API version 34.0 and earlier.</p> <p>A reference to a user. This field is used with the <code>TracedEntityID</code> field.</p> <ul style="list-style-type: none"> • When the value is <code>user</code>, the actions of the user or entity specified by <code>TracedEntityID</code> are traced to the system log at the described level. System logs are visible only to you. Use this scope for class-level filtering. If there are both user and entity-level flags, the user flags take precedence until a method from a class with an entity trace flag is entered. When the method returns, the user trace flags are restored. • When the value is <code>emptyid</code>, the user's actions are traced to the org's debug log at the described level. Debug logs are visible to all administrators. This option is only available if <code>TracedEntityID</code> references a user (not an Apex class or Apex trigger). The variable <code>emptyid</code> can be the value <code>0000000000000000</code> or null. <p>The scope defined here is reflected in the ApexLog Location field.</p> |
| StartDate | <p>Type</p> <p>dateTime</p> <p>Properties</p> <p>Create, Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>The date and time when the trace flag takes effect. <code>ExpirationDate</code> must be less than 24 hours after <code>StartDate</code>. Only one trace flag per traced entity can be active at a time. If <code>StartDate</code> is null, <code>ExpirationDate</code> must be less than 24 hours from the current time.</p> |

| Field Name | Details |
|----------------|---|
| System | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category level for calls to all system methods, such as the <code>System.debug</code> method. The following are valid values.</p> <ul style="list-style-type: none">• NONE• ERROR• WARN• INFO• DEBUG• FINE• FINER• FINEST <p>This field is required.</p> |
| TracedEntityId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort, Update</p> <p>Description A reference to the following:</p> <ul style="list-style-type: none">• Apex class• Apex trigger• User <p>This field is used with the <code>LogType</code> field. This field is required.</p> |
| Validation | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category level for validation rules. Includes information about validation rules, such as the name of the rule, or whether the rule evaluated <code>true</code> or <code>false</code>. The following are valid values.</p> <ul style="list-style-type: none">• NONE• ERROR• WARN• INFO |

| Field Name | Details |
|-------------|--|
| | <ul style="list-style-type: none">• DEBUG• FINE• FINER• FINEST <p>This field is required.</p> |
| Visualforce | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category level for Visualforce. Includes information about Visualforce events, including serialization and deserialization of the view state or the evaluation of a formula field in a Visualforce page. The following are valid values.</p> <ul style="list-style-type: none">• NONE• ERROR• WARN• INFO• DEBUG• FINE• FINER• FINEST <p>This field is required.</p> |
| Workflow | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The log category level for workflow rules. Includes information for workflow rules, such as the rule name and the actions taken. This field is required. The following are valid values.</p> <ul style="list-style-type: none">• NONE• ERROR• WARN• INFO• DEBUG• FINE• FINER• FINEST |

Usage

To diagnose a functional issue or a performance problem, use the `TraceFlag` object to set up logging for yourself or for another user. The following options are available.

- To set up logging for a specific user, set `LogType` to `USER_DEBUG` and `TracedEntityId` to the ID of the user. This option can be configured only for a user, not for an Apex class or Apex trigger.
- To set up logging level overrides for an Apex class or trigger, set `LogType` to `CLASS_TRACING` and `TracedEntityId` to the ID of the Apex class or trigger. `CLASS_TRACING` trace flags override other logging levels, but don't cause logs to be generated or persisted.

TransactionSecurityPolicy

Represents a transaction security policy definition.

This object is available in Tooling API version 35.0 and later.

Supported Calls


`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST Methods

Query, DELETE, GET, PATCH, POST

Fields

| Field | Details |
|--------------|---|
| ActionConfig | <p>Type textarea</p> <p>Properties Create, Update</p> <p>Description Describes the action to take when the matching Transaction Security policy is triggered. Also indicates the type of notifications selected and the ID of the intended recipient. The recipient must be active and assigned the Modify All Data and View Setup user permissions. Multiple actions can be taken. The actions available depend on the EventType field.</p> |
| ApexPolicyId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Represents the Apex <code>TxnSecurity.PolicyCondition</code> or <code>TxnSecurity.EventCondition</code> interface for this policy.</p> |

| Field | Details |
|--------------------|--|
| BlockMessage | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The custom message a user receives when their action is blocked by a policy. Used in Real-Time Event Monitoring only. Maximum of 1000 characters. This field appears as null when the default message option is selected and is available only when <code>EventName</code> is set to <code>ApiEvent</code>, <code>ListViewEvent</code>, and <code>ReportEvent</code>. Available in API version 49.0 and later.</p> |
| CustomEmailContent | <p>Type string</p> <p>Properties Filter, Nillable, Sort,</p> <p>Description The administrator-created custom email content sent when a policy is triggered. Used in Real-Time Event Monitoring only. Maximum of 1333 characters. This field is null when the Custom Email Content setting is selected in the UI but no message content is entered. Available in API version 54.0 and later. Custom messages aren't translatable.</p> |
| Description | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The description entered for this policy. This field available in API 39.0 and later.</p> |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The API, or program name, for this policy.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| EventName | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> |

Field**Details****Description**

Used in Real-Time Event Monitoring only. Indicates the name of the event the policy monitors. This field is available in API 31.0 and later. Valid values are:

- **ApiEvent**—Tracks these user-initiated read-only API calls: `query()`, `queryMore()`, and `count()`. Captures API requests through SOAP API and Bulk API for the Enterprise and Partner WSDLs. Tooling API calls and API calls originating from a Salesforce mobile app aren't captured.
- **CredentialStuffingEventStore**—Tracks when a user successfully logs into Salesforce during an identified credential stuffing attack. Credential stuffing refers to large-scale automated login requests using stolen user credentials. This value is available in API 49.0 and later.
- **FileEventStore (beta)**—Tracks when a user downloads, previews, or uploads a file. FileEventStore is a big object that stores the event data of FileEvent. This object is available in API version 57.0 and later.
- **ListViewEvent**—Tracks when users access data with list views using Lightning Experience, Salesforce Classic, or the API. It doesn't track list views of Setup entities.
- **LoginEvent**—LoginEvent tracks the login activity of users who log in to Salesforce.
- **PermissionSetEventStore**—Tracks changes to permission sets and permission set groups.
- **ReportAnomalyEventStore**—Tracks anomalies in how users run or export reports, including unsaved reports. This value is available in API 49.0 and later.
- **ReportEvent**—Tracks when reports are run in your org.
- **SessionHijackingEventStore**—Tracks when unauthorized users gain ownership of a Salesforce user's session with a stolen session identifier. To detect such an event, Salesforce evaluates how significantly a user's current browser fingerprint diverges from the previously known fingerprint using a probabilistically inferred significance of change. This value is available in API 49.0 and later.

EventType**Type**

picklist



Properties


Filter, Group, Nillable, Restricted picklist, Sort


Description

Used in Legacy Transaction Security only. Indicates the type of event the policy monitors. Valid values are:

- **AccessResource**—Notifies you when the selected resource has been accessed.
- **AuditTrail**—Reserved for future use.
- **DataExport**—Notifies you when any API query is made, such as from the Data Loader API client, or when a Report export occurs.
- **Entity**—Notifies you on use of an object type such as an authentication provider or chatter post.
- **Login**—Notifies you when a user logs in.

| Field | Details |
|-----------------|---|
| |  Note: As of Summer '20, Legacy Transaction Security is a retired feature in all Salesforce orgs. |
| ExecutionUserId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Used in Legacy Transaction Security only. The ID of an active user who is assigned the Modify All Data and View Setup user permissions.</p>  Note: As of Summer '20, Legacy Transaction Security is a retired feature in all Salesforce orgs. |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated object in the Metadata API. Use to avoid race conditions on create, before you have IDs.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged <p>This field is available in API version 38.0 and later.</p> |


| Field | Details |
|-----------------|--|
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The policy's name.</p> <p> Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.</p> |
| Metadata | <p>Type mns:TransactionSecurityPolicy</p> <p>Properties Create, Nillable, Update</p> <p>Description The policy's metadata. See the Metadata API Developer Guide for details.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none">• In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer.• In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| ResourceName | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> |

| Field | Details |
|-------|---|
| | <p>Description</p> <p>Used in Legacy Transaction Security only. A resource used to narrow down the conditions under which the policy triggers. For example, with a <code>DataExport</code> event, you can select a resource <code>Lead</code> to specifically monitor export activity occurring on your <code>Lead</code> entities. The resources available depend on the <code>EventType</code> field.</p> <p> Note: As of Summer '20, Legacy Transaction Security is a retired feature in all Salesforce orgs.</p> |
| State | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>Indicates whether the policy is active. Valid values are:</p> <ul style="list-style-type: none"> • Disabled • Enabled |
| Type | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>The type of validation that the policy uses. The valid values are:</p> <ul style="list-style-type: none"> • <code>CustomApexPolicy</code>— Created with Apex editor. • <code>CustomConditionBuilderPolicy</code>— Created with Condition Builder <p>The default value is <code>CustomApexPolicy</code>.</p> |

User

Represents a user. You can retrieve standard fields on `User` with the Tooling API, but custom fields can't be retrieved.

This object is available in API version 32.0 and later.

 **Note:** User fields are exposed in SOAP API version 45.0 and later. You can use Tooling API to query for `User` fields in guest user mode in API version 44.0 and earlier. In API version 45.0 and later, use SOAP API to get this data in guest user mode. `User` is still exposed in Tooling API to `User Profiles` with the `ViewSetUp` permission.

Supported SOAP Calls

`describeLayout()`, `getDeleted()`, `getUpdated()`, `query()`, `retrieve()`, `search()`, `update()`

Supported REST HTTP Methods

GET, PATCH

Fields

| Field | Details |
|-------------|---|
| FirstName | Type string Properties Create, Filter, Group, NillableSort, Update Description The user's first name. |
| LastName | Type string Properties Create, Filter, Group, NillableSort, Update Description The user's last name. |
| Name | Type string Properties Filter, Group, Sort Description Concatenation of <code>FirstName</code> and <code>LastName</code> . Limited to 121 characters. |
| Username | Type string Properties Create, Filter, Group, idLookup, Sort, Update Description The name of the user in your organization. |
| WorkspaceId | Type ID Properties Filter, Group, Nillable, Sort, Update Description The ID of the last open Developer Console workspace. |

UserAccessPolicy (Beta)

Represents a user access policy. This object is available in API version 57.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

GET, POST, PATCH, DELETE, HEAD, Query

Special Access Rules


To create or modify user access policies, users must have the Manage User Access Policies permission.



Note: This feature is a Beta Service. Customer may opt to try such Beta Service in its sole discretion. Any use of the Beta Service is subject to the applicable Beta Services Terms provided at [Agreements and Terms](#).

Fields

| Field | Details |
|---------------|---|
| BooleanFilter | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Required. The logic that determines how your user criteria filters are applied in the user access policy. For instance, if you have two user access policy filters with the <code>SortOrder</code> equal to 1 and 2, respectively, the <code>BooleanFilter</code> can be <code>1 AND 2</code> or <code>1 OR 2</code>.</p> |
| Description | <p>Type</p> <p>textarea</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Description of the user access policy.</p> |
| DeveloperName | <p>Type</p> <p>string</p> |

| Field | Details |
|-----------------|--|
| | <p>Properties Filter, Group, Sort</p> <p>Description The unique name for the user access policy.</p> <p>The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Name.</p> <p> Note: When creating large sets of data, always specify a unique <code>DeveloperName</code> for each record.</p> |
| Language | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The language of the user access policy.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • <code>beta</code> • <code>deleted</code> • <code>deprecated</code> • <code>deprecatedEditable</code> • <code>installed</code> • <code>installedEditable</code> • <code>released</code> • <code>unmanaged</code> |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Label for the user access policy. In the UI, this field is Label.</p> |

| Field | Details |
|-----------------|---|
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| Status | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The status of the user access policy.</p> <p>Possible values are:</p> <ul style="list-style-type: none"> • Active • Completed • Design • Failed • Migrate • Testing • Updating <p>The default value is <code>Design</code>.</p> |
| TriggerType | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The type of user record trigger for which this user access policy runs.</p> |

| Field | Details |
|-------|--|
| | <p>Possible values are:</p> <ul style="list-style-type: none"> • Create—The user access policy runs when a user who matches the policy criteria is created. • CreateAndUpdate—The user access policy runs when a user who matches the policy criteria is either created or updated. • Update—The user access policy runs when a user who matches the policy criteria is updated. |

Usage

For more information, see [User Access Policies \(Beta\)](#) in Salesforce Help.

UserAccessPolicyAction (Beta)

Represents an action applied by the user access policy. This object is available in API version 57.0 and later.

Supported SOAP API Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

GET, POST, PATCH, DELETE, HEAD, Query

Special Access Rules

To create or modify user access policies, users must have the Manage User Access Policies permission.



Note: This feature is a Beta Service. Customer may opt to try such Beta Service in its sole discretion. Any use of the Beta Service is subject to the applicable Beta Services Terms provided at [Agreements and Terms](#).

Fields

| Field | Details |
|--------|---|
| Action | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Indicates whether the user access policy grants access to or removes access from the target access mechanism.</p> |

| Field | Details |
|----------|---|
| | <p>Possible values are:</p> <ul style="list-style-type: none"> • Grant • Revoke |
| TargetId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The ID of the access mechanism that the user access policy applies. This field is a polymorphic relationship field.</p> <p>Relationship Name Target</p> <p>Relationship Type Lookup</p> <p>Refers To Group, Queue, PermissionSet, PermissionSetGroup</p> |

Usage

For more information, see [User Access Policies \(Beta\)](#) in Salesforce Help.

UserAccessPolicyFilter (Beta)

Represents a user criteria filter for a user access policy. This object is available in API version 57.0 and later.

You can use the UserAccessPolicyFilter Tooling API object to configure more complex user criteria filters for your user access policies.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

GET, POST, PATCH, DELETE, HEAD, Query

Special Access Rules

To create or modify user access policies, users must have the Manage User Access Policies permission.



Note: This feature is a Beta Service. Customer may opt to try such Beta Service in its sole discretion. Any use of the Beta Service is subject to the applicable Beta Services Terms provided at [Agreements and Terms](#).

Fields

| Field | Details |
|------------|---|
| ColumnName | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description If <code>Target</code> is set to <code>User</code>, the user field that your user criteria filter is based on. Possible values are:</p> <ul style="list-style-type: none">• <code>CommunityNickname</code>• <code>Department</code>• <code>Division</code>• <code>Email</code>• <code>FirstName</code>• <code>IsActive</code>• <code>LastName</code>• <code>Title</code> <p>Some custom fields are also supported, depending on the field type. If you don't set <code>Target</code> to <code>User</code>, then this field isn't used.</p> |
| Operation | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The operator of the user criteria filter. Possible values are:</p> <ul style="list-style-type: none">• <code>equals</code>• <code>in</code>— Available in API version 58.0 and later.• <code>not equal</code> <p>Select <code>in</code> if you want to reference multiple profile or role IDs in the same user criteria filter. To do this, create multiple <code>UserAccessPolicyFilter</code> objects with <code>Operation</code> set to <code>in</code> and with the same <code>SortOrder</code> value. The only field that differs between these <code>UserAccessPolicyFilter</code> objects is the <code>Value</code> field, which references the various IDs. All of the IDs referenced in the <code>in</code> expression must be of the same type.</p> |
| SortOrder | <p>Type int</p> <p>Properties Filter, Group, Sort</p> |

| Field | Details |
|--------|---|
| | Description The numeric reference used to identify the specific filter. |
| Target | Type picklist Properties Filter, Group, Restricted picklist, Sort Description If your user criteria filter is based on a user field, set to <code>User</code> . If your user criteria filter is based on a package license, permission set, permission set group, permission set license, profile, or role, then this field isn't used. |
| Value | Type string Properties Filter, Group, Nillable, Sort Description If <code>Target</code> is set to <code>User</code> , the value of the user field specified in <code>ColumnName</code> that your user filter is operating on. Otherwise, the ID of the package license, permission set, permission set group, permission set license, profile, or role that your user filter is operating on. |

Usage

For more information, see [User Access Policies \(Beta\)](#) in Salesforce Help.

UserCriteria

Represents the member criteria to use in Experience Cloud site moderation rules. Available in Tooling API version 39.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

GET

Fields

| Field | Details |
|----------------|---|
| Description | <p>Type textarea</p> <p>Properties Filter, Nillable, Sort</p> <p>Description The description of the user criteria.</p> |
| Developer Name | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description API name of the developer. This name can contain only underscores and alphanumeric characters and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the moderation rule. Valid values are:</p> <ul style="list-style-type: none"> Chinese (Simplified): zh_CN Chinese (Traditional): zh_TW Danish: da Dutch: nl_NL English: en_US |

| Field | Details |
|-------------|---|
| | <ul style="list-style-type: none"> • Finnish: <code>fi</code> • French: <code>fr</code> • German: <code>de</code> • Italian: <code>it</code> • Japanese: <code>ja</code> • Korean: <code>ko</code> • Norwegian: <code>no</code> • Portuguese (Brazil): <code>pt_BR</code> • Russian: <code>ru</code> • Spanish: <code>es</code> • Spanish (Mexico): <code>es_MX</code> Spanish (Mexico) defaults to Spanish for customer-defined translations. • Swedish: <code>sv</code> • Thai: <code>th</code> The Salesforce user interface is fully translated to Thai, but Help is in English. |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group Sort</p> <p>Description The label for the user criteria.</p> |
| Metadata | <p>Type <code>mns:UserCriteria</code></p> <p>Properties Create, Nillable, Update</p> <p>Description The user criteria metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

UserEntityAccess

Represents the access that the current user has to an object. Available in Tooling API version 34.0 and later.

Supported SOAP Calls

`query()`, `search()`

Supported REST HTTP Methods

GET

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|--------------------|---|
| DurableId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</p> |
| EntityDefinition | <p>Type EntityDefinition</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The entity definition for the object associated with this user entity access record. Because this field represents a relationship, use only in subqueries.</p> |
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the EntityDefinition.</p> |
| IsActivateable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to activate records of the associated object type if the User owns them. For example, a user owns an Apex trigger or workflow rule, and can activate them if this field is <code>true</code> for ApexTrigger or WorkflowRule.</p> |

| Field | Details |
|----------------|--|
| IsCreatable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to create records of the associated object type.</p> |
| IsDeletable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to delete records of the associated object type.</p> |
| IsEditable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to edit records of the associated object type.</p> |
| IsFlsUpdatable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to change field-level security settings on appropriate fields of the associated object type. For example, an administrator could deny a group of users access to the <code>Type</code> field on Account.</p> |
| IsMergeable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to merge records of the associated object type.</p> |

| Field | Details |
|---------------------------|--|
| <code>IsReadable</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to view records of the associated object type.</p> |
| <code>IsUndeetable</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to undelete records of the associated object type.</p> |
| <code>IsUpdatable</code> | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to edit records of the associated object type.</p> |
| <code>User</code> | <p>Type User</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The user who has the access defined in this user entity access record, for the entity specified in the <code>EntityDefinition</code> field. Because this field represents a relationship, use only in subqueries.</p> |
| <code>UserId</code> | <p>Type ID</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the user specified in the <code>User</code> field.</p> |

Usage

Queries on UserEntityAcces need filters on both the entity side and the user side.

Example: Entity Side

```
SELECT EntityDefinition.QualifiedApiName, EntityDefinition.MasterLabel
FROM UserEntityAccess WHERE UserId={current_user_id}
AND IsCreateable=true AND EntityDefinition.IsCustomizable=true
```

Example: User Side

```
UserId={current_user_id}
```

UserFieldAccess

Represents the access that the current user has to a field. Available in Tooling API version 34.0 and later.

Fields

| Field | Details |
|--------------------|---|
| DurableId | <div>Type</div> <div>string</div> <div>Properties</div> <div>Filter, Group, Nillable, Sort</div> <div>Description</div> <div>Unique identifier for the field. Always retrieve this value before using it, as the value isn't guaranteed to stay the same from one release to the next. To simplify queries, use this field.</div> |
| EntityDefinition | <div>Type</div> <div>EntityDefinition</div> <div>Properties</div> <div>Filter, Group, Nillable, Sort</div> <div>Description</div> <div>The entity definition for the object associated with this user entity access record.</div> |
| EntityDefinitionId | <div>Type</div> <div>string</div> <div>Properties</div> <div>Filter, Group, Nillable, Sort</div> <div>Description</div> <div>ID of the EntityDefinition.</div> |
| IsAccessible | <div>Type</div> <div>boolean</div> |

| Field | Details |
|-------------|---|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to view the associated field.</p> |
| IsCreatable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to create records of the associated field.</p> |
| IsUpdatable | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If <code>true</code>, the user specified in the <code>User</code> field has access to edit the associated field.</p> |
| User | <p>Type User on page 778</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The user who has access defined in this user field access record, for the entity specified in the <code>EntityDefinition</code> field. Because this field represents a relationship, use only in subqueries.</p> |
| UserId | <p>Type ID</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description ID of the user specified in the <code>User</code> field.</p> |

SOQL Limitations

This object doesn't support some SOQL operations.

GROUP BY

Example Query: `SELECT COUNT(qualifiedapiname), isfeedenabled FROM EntityDefinition GROUP BY isfeedenabled`

Error Returned: The requested operation is not yet supported by this SObject storage type, contact salesforce.com support for more information.

LIMIT, LIMIT OFFSET

Example Queries:

`SELECT qualifiedapiname FROM EntityDefinition LIMIT 5`

`SELECT qualifiedapiname FROM EntityDefinition LIMIT 5 OFFSET 10`

An incorrect result is returned because LIMIT and LIMIT OFFSET are ignored.

NOT

Example Query: `SELECT qualifiedapiname FROM EntityDefinition WHERE qualifiedapiname!='Account'`

Error Returned: Only equals comparisons permitted

OR

Example Query: `SELECT qualifiedapiname, keyprefix FROM EntityDefinition WHERE isdeletable=true OR (isfeedenabled=false AND keyprefix='01j')`

Error Returned: Disjunctions not supported

INCLUDES

Example Query: `SELECT ComplianceGroup FROM FieldDefinition WHERE EntityDefinitionId = 'Account' AND ComplianceGroup includes('GDPR')`

Error Returned: Unsupported filter type

ValidationRule

Represents a validation rule or workflow rule which specifies the formula for when a condition is met. Available from API version 34.0 or later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

Query, GET, POST, PATCH

Fields

| Field Name | Details |
|------------|------------------------|
| Active | Type boolean |

| Field Name | Details |
|--------------------|--|
| | <p>Properties Defaulted on create, Filter, Group, Sort.</p> <p>Description Required. Indicates whether this validation rule is active, (<code>true</code>), or not active (<code>false</code>).</p> |
| Description | <p>Type string</p> <p>Properties Filter, Nillable, Sort.</p> <p>Description A description of the validation rule.</p> |
| EntityDefinition | <p>Type EntityDefinition</p> <p>Properties Filter, Group, Sort.</p> <p>Description Required. The entity definition for the object associated with the validation rule.</p> |
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Sort.</p> <p>Description Required. ID of the record in <code>EntityDefinition</code>.</p> |
| ErrorDisplayField | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort.</p> <p>Description The fully specified name of a field in the application. If a value is supplied, the error message appears next to the specified field. If you do not specify a value or the field isn't visible on the page layout, the value changes automatically to <code>Top of Page</code>.</p> |
| ErrorMessage | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort .</p> |

| Field Name | Details |
|-----------------|--|
| | <p>Description</p> <p>Required. The message that appears if the validation rule fails. The message must be 255 characters or less.</p> |
| FullName | <p>Type</p> <p>string</p> <p>Properties</p> <p>Create, Group, Nillable.</p> <p>Description</p> <p>The internal name of the object. White spaces and special characters are escaped for validity. The name must:</p> <ul style="list-style-type: none"> • Contain characters, letters, or the underscore (_) character • Must start with a letter • Can't end with an underscore • Can't contain two consecutive underscore characters. <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Id | <p>Type</p> <p>Id</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, idLookup, Sort.</p> <p>Description</p> <p>The unique system ID for this record.</p> |
| ManageableState | <p>Type</p> <p>ManageableState enumerated list</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |

| Field Name | Details |
|-----------------|--|
| Metadata | <p>Type ValidationRule Metadata</p> <p>Properties Create, Nillable, Update.</p> <p>Description Validation rule metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort.</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation. The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, NamespacePrefix is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| ValidationName | <p>Type string</p> <p>Properties Filter, Group, Namefield, Sort.</p> <p>Description The name or ID of the object that this rule is associated with.</p> |

ValidationRule Metadata

`active`, `description`, `errorDisplayField`, and `errorMessage` are described in the previous table.

| Field Name | Details |
|------------------------------------|---|
| <code>errorConditionFormula</code> | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort</p> <p>Description</p> <p>Required. The formula defined in the validation rule. If the formula returns a value of <code>true</code>, an error message is displayed.</p> |

VirtualVisitConfig

Represents the configuration of an external video provider, which relays events from Salesforce to the provider. This object is available in API version 56.0 and later.



Important: Where possible, we changed noninclusive terms to align with our company value of Equality. We maintained certain terms to avoid any effect on customer implementations.

Supported SOAP API Calls

`create()`, `delete()`, `describeObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST API Methods

`DELETE`, `GET`, `HEAD`, `PATCH`, `POST`, `Query`

Special Access Rules

Fields

To use the Virtual Visit feature you need the Video Call license add on

| Field | Details |
|------------------------------------|---|
| <code>ComprehendServiceType</code> | <p>Type</p> <p>picklist</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>Specifies the type of service used to convert speech into text or to analyze the converted speech text.</p> <p>Possible values are:</p> <ul style="list-style-type: none">• <code>ComprehendMedicalService</code>—Transcribe Medical |

| Field | Details |
|------------------------|---|
| | <ul style="list-style-type: none"> ComprehendService—Transcribe |
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The unique name for the VirtualVisitConfig object.</p> <p>Required. The unique name of the object in the API. This name can contain only underscores and alphanumeric characters, and must be unique in your org. It must begin with a letter, not include spaces, not end with an underscore, and not contain two consecutive underscores. In managed packages, this field prevents naming conflicts on package installations. With this field, a developer can change the object's name in a managed package and the changes are reflected in a subscriber's organization. Label is Record Type Name.</p> |
| ExperienceCloudSiteUrl | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The URL of the Digital Experience site where the Video Call component is available to portal or guest users.</p> |
| ExternalRoleIdentifier | <p>Type string</p> <p>Properties Filter, Nillable, Sort</p> <p>Description Enter the ID of the role that's used to allow users join a video call and to grant them temporary access to certain functions needed to participate in the call.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated VirtualVisitConfig in Metadata API. The full name can include a namespaceprefix.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|-----------------|--|
| Language | <p>Type picklist</p> <p>Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The language of the VirtualVisitConfig.</p> |
| ManageableState | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package: Possible values are:</p> <ul style="list-style-type: none"> • <code>beta</code>—Managed-Beta • <code>deleted</code>—Managed-Proposed-Deleted • <code>deprecated</code>—Managed-Proposed-Deprecated • <code>deprecatedEditable</code>—SecondGen-Installed-Deprecated • <code>installed</code>—Managed-Installed • <code>installedEditable</code>—SecondGen-Installed-Editable • <code>released</code>—Managed-Released • <code>unmanaged</code>—Unmanaged |
| MasterLabel | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description Label for the VirtualVisitConfig. In the UI, this field is Virtual Visit Config.</p> |
| MessagingRegion | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Specifies the region in which the waiting room and messaging channel data is processed and stored. Available in API version 57.0 and later.</p> |
| Metadata | <p>Type EventRelayConfig</p> |

| Field | Details |
|-------------------|---|
| | <p>Properties Create, Nillable, Update</p> <p>Description The VirtualVisitConfig's metadata.</p> |
| NamedCredentialId | <p>Type reference</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The named credential record that's used to authenticate and authorize an account of the video call vendor. This field is a relationship field.</p> <p>Relationship Name NamedCredential</p> <p>Relationship Type Lookup</p> <p>Refers To NamedCredential</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation. The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, <code>NamespacePrefix</code> is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| StorageBucketName | <p>Type string</p> |

| Field | Details |
|------------------------|---|
| | <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The name of the storage bucket that stores the meeting transcript.</p> |
| UsageType | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description The name of the Salesforce feature for which the video call configuration record is created. Possible values are:</p> <ul style="list-style-type: none"> • CHIME—Chime • INTELLIGENT_FORM_READER—Intelligent Form Reader • SENTIMENT_ANALYSIS—Sentiment Analysis |
| VideoCallApptTypeValue | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The Default Appointment Type picklist values from the Service Appointment object that represent a video appointment type. Use semicolons to separate multiple values.</p> |
| VideoControlRegion | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Specifies the region through which API calls related to Video Calls are made. Available in API version 57.0 and later.</p> |
| VisitRegion | <p>Type picklist</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Specifies the region through which the Video Call video and audio data are processed. Possible values are:</p> <ul style="list-style-type: none"> • af-south-1—Africa (Cape Town) • ap-east-1—Asia Pacific (Hong Kong) |

| Field | Details |
|-------|---|
| | <ul style="list-style-type: none"> • <code>ap-northeast-1</code>—Asia Pacific (Tokyo) • <code>ap-northeast-2</code>—Asia Pacific (Seoul) • <code>ap-northeast-3</code>—Asia Pacific (Osaka) • <code>ap-south-1</code>—Asia Pacific (Mumbai) • <code>ap-southeast-1</code>—Asia Pacific (Singapore) • <code>ap-southeast-2</code>—Asia Pacific (Sydney) • <code>ca-central-1</code>—Canada (Central) • <code>eu-central-1</code>—Europe (Frankfurt) • <code>eu-north-1</code>—Europe (Stockholm) • <code>eu-south-1</code>—Europe (Milan) • <code>eu-west-1</code>—Europe (Ireland) • <code>eu-west-2</code>—Europe (London) • <code>eu-west-3</code>—Europe (Paris) • <code>me-south-1</code>—Middle East (Bahrain) • <code>sa-east-1</code>—South America (São Paulo) • <code>us-east-1</code>—US East (N. Virginia) • <code>us-east-2</code>—US East (Ohio) • <code>us-west-1</code>—US West (N. California) • <code>us-west-2</code>—US West (Oregon) |

WebLink

Represents a custom button or link. Available in the Tooling API from API version 34.0 or later.

Supported SOAP Calls

`getUpdated()`, `query()`, `retrieve()`, `search()`

Supported REST HTTP Methods

GET

Fields

| Field Name | Details |
|-------------|-----------------------|
| Description | Type string |

| Field Name | Details |
|------------------|--|
| | <p>Properties Filter, Nillable, Sort</p> <p>Description A description of the button or link.</p> |
| DisplayType | <p>Type string</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description Represents how the button or link is rendered. Valid values are:</p> <ul style="list-style-type: none"> • <code>link</code> for a hyperlink • <code>button</code> for a button • <code>massActionButton</code> for a button attached to a related list |
| EncodingKey | <p>Type string</p> <p>Properties Filter, Sort</p> <p>Description Valid values include:</p> <ul style="list-style-type: none"> • <code>UTF-8</code>—Unicode (UTF-8) • <code>ISO-8859-1</code>—General US & Western Europe (ISO-8859-1, ISO-LATIN-1) • <code>Shift_JIS</code>—Japanese (Shift-JIS) • <code>ISO-2022-JP</code>—Japanese (JIS) • <code>EUC-JP</code>—Japanese (EUC-JP) • <code>x-SJIS_0213</code>—Japanese (Shift-JIS_2004) • <code>ks_c_5601-1987</code>—Korean (ks_c_5601-1987) • <code>Big5</code>—Traditional Chinese (Big5) • <code>GB2312</code>—Simplified Chinese (GB2312) • <code>Big5-HKSCS</code>—Traditional Chinese Hong Kong (Big5-HKSCS) |
| EntityDefinition | <p>Type EntityDefinition</p> <p>Properties Filter, Group, Sort.</p> <p>Description Required. Available in API version 34.0. The entity definition for the object associated with this button or link.</p> |

| Field Name | Details |
|--------------------|---|
| EntityDefinitionId | <p>Type string</p> <p>Properties Filter, Group, Sort.</p> <p>Description Required. ID of the record associated with the button or link. The record's object type is in <code>EntityDefinition</code>.</p> |
| FullName | <p>Type string</p> <p>Properties Filter, Group, Sort.</p> <p>Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| HasMenubar | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort.</p> <p>Description If <code>OpenType</code> is <code>newWindow</code>, this field indicates whether to show the browser menu bar for the popup window (<code>true</code>, or not (<code>false</code>)). For other values of <code>OpenType</code>, don't specify a value here.</p> |
| HasScrollbars | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort.</p> <p>Description If the value of <code>OpenType</code> is <code>newWindow</code>, this field indicates whether to show the scroll bars for the window (<code>true</code>) or not (<code>false</code>). For other values of <code>OpenType</code>, don't specify a value here.</p> |
| HasToolbar | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort.</p> |

| Field Name | Details |
|-----------------|---|
| | <p>Description</p> <p>If the value of <code>OpenType</code> is <code>newWindow</code>, this field indicates whether to show the browser toolbar for the window (<code>true</code>) or not (<code>false</code>). For other values of <code>OpenType</code>, don't specify a value here.</p> |
| Height | <p>Type</p> <p>int</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort.</p> <p>Description</p> <p>Required if the value of <code>OpenType</code> is <code>newWindow</code>. Height in pixels of the window opened by the button or link. For other values of <code>OpenType</code>, don't specify a value here.</p> |
| IsResizable | <p>Type</p> <p>boolean</p> <p>Properties</p> <p>Defaulted on create, Filter, Group, Sort.</p> <p>Description</p> <p>If the value of <code>OpenType</code> is <code>newWindow</code>, this field indicates whether to allow resizing of the window (<code>true</code>) or not (<code>false</code>). For other values of <code>OpenType</code>, don't specify a value here.</p> |
| LinkType | <p>Type</p> <p>WebLinkType enumerated list</p> <p>Properties</p> <p>Filter, Group, Restricted picklist, Sort</p> <p>Description</p> <p>Required. Represents whether the content of the button or link is specified by a URL, an sControl, a JavaScript code block, or a Visualforce page.</p> <ul style="list-style-type: none">• url• sControl• javascript• page• flow—Reserved for future use. |
| ManageableState | <p>Type</p> <p>ManageableState enumerated list</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> |

| Field Name | Details |
|-----------------|--|
| | <p>Description</p> <p>Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| MasterLabel | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Nillable, Sort, Update</p> <p>Description</p> <p>Master label for this object. This display value is the internal label that is not translated. Limit: 240 characters.</p> |
| Metadata | <p>Type</p> <p>mns:WebLink</p> <p>Properties</p> <p>Filter, Group, idLookup, Sort</p> <p>Description</p> <p>The metadata for this object as defined in the Metadata API.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Name | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, idLookup, Sort</p> <p>Description</p> <p>Required. Name to display on the page.</p> |
| NamespacePrefix | <p>Type</p> <p>string</p> <p>Properties</p> <p>Filter, Group, Sort.</p> |

| Field Name | Details |
|---------------------|---|
| | <p>Description</p> <p>The namespace prefix associated with this object. Each Developer Edition organization that creates a managed package has a unique namespace prefix. Limit: 15 characters. You can refer to a component in a managed package by using the <i>namespacePrefix__componentName</i> notation.</p> <p>The namespace prefix can have one of the following values:</p> <ul style="list-style-type: none"> • In Developer Edition organizations, the namespace prefix is set to the namespace prefix of the organization for all objects that support it. There is an exception if an object is in an installed managed package. In that case, the object has the namespace prefix of the installed managed package. This field's value is the namespace prefix of the Developer Edition organization of the package developer. • In organizations that are not Developer Edition organizations, NamespacePrefix is only set for objects that are part of an installed managed package. There is no namespace prefix for all other objects. |
| OpenType | <p>Type</p> <p>WebLinkWindowType enumerated list</p> <p>Properties</p> <p>Filter, Group, Sort</p> <p>Description</p> <p>The window style used to display the content. Valid values are:</p> <ul style="list-style-type: none"> • newWindow • sidebar • noSidebar • replace • onClickJavaScript |
| Position | <p>Type</p> <p>WebLinkPosition enumerated list</p> <p>Properties</p> <p>Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description</p> <p>If the value of OpenType is newWindow, this field indicates how the new window should be displayed. Otherwise, don't specify a value. Valid values are:</p> <ul style="list-style-type: none"> • fullScreen • none • topLeft |
| RequireRowSelection | <p>Type</p> <p>boolean</p> |

| Field Name | Details |
|----------------------------|---|
| | <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description If the value of <code>OpenType</code> is <code>massAction</code>, this field indicates whether to require individual row selection to execute the action for this button (<code>true</code>) or not (<code>false</code>). Otherwise, leave this field empty.</p> |
| <code>Scontrol</code> | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description If the value of <code>LinkType</code> is <code>sControl</code>, this field represents the name of the <code>sControl</code>. Otherwise, leave this field empty.</p> |
| <code>ShowsLocation</code> | <p>Type boolean</p> <p>Properties Filter, Group, Sort</p> <p>Description If the value of <code>OpenType</code> is <code>newWindow</code>, this field indicates whether to show the browser location bar for the window (<code>true</code>) or not (<code>false</code>). Otherwise, leave this field empty.</p> |
| <code>ShowsStatus</code> | <p>Type boolean</p> <p>Properties Filter, Group, Sort</p> <p>Description If the value of <code>OpenType</code> is <code>newWindow</code>, show the browser status bar for the window (<code>true</code>). Otherwise, don't specify a value.</p> |
| <code>Url</code> | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description Required. Represents the URL of the page to link to. Can include fields as tokens within the URL. Limit: 1,024 KB.</p> <p>If the value of <code>LinkType</code> is <code>url</code>, this field represents the URL value. If the value of <code>LinkType</code> is <code>javascript</code>, this field represents the JavaScript content. For other values of <code>LinkType</code>, leave this field empty.</p> |

| Field Name | Details |
|------------|--|
| | Content must be escaped in a manner consistent with XML parsing rules. |
| Width | Type int Properties Filter, Group, Nillable, Sort Description The width in pixels of the window opened by the button or link. Required if the value of <code>OpenType</code> is <code>newWindow</code> . Otherwise, leave this field empty. |

WorkflowAlert

Represents a workflow alert. A workflow alert is an email generated by a workflow rule or approval process and sent to designated recipients.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|-------------|--|
| CcEmails | Type string Properties Filter, Nillable, Sort Description Additional CC email addresses. |
| Description | Type string Properties Filter, Group, idLookup, Sort |

| Field | Details |
|--------------------|--|
| | Description A description of the workflow alert. |
| DeveloperName | Type string Properties Filter, Group, Sort Description The unique name of the workflow alert in the API. |
| EntityDefinition | Type EntityDefinition Properties Filter, Group, Sort. Description Required. Available in version 34.0. The entity definition for the object associated with this WebLink. |
| EntityDefinitionId | Type string Properties Filter, Group, Sort Description The ID of the entity containing the alert. |
| FullName | Type string Properties Create, Group, Nillable Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort Description Indicates the manageable state of the specified component that is contained in a package: |

| Field | Details |
|-----------------|--|
| | <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Metadata | <p>Type mns:WorkflowAlert</p> <p>Properties Create, Nillable, Update</p> <p>Description Alert definition metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The namespace of the package to uniquely identify the workflow alert.</p> |
| SenderType | <p>Type ActionEmailSenderType enumerated list</p> <p>Properties Defaulted on create, Filter, Group, Restricted picklist, Sort</p> <p>Description The type of sender. Values are:</p> <ul style="list-style-type: none"> • CurrentUser • OrgWideEmailAddress • DefaultWorkflowUser |
| TemplateId | <p>Type ID</p> <p>Properties Filter, Group, Sort</p> |

| Field | Details |
|-------|---|
| | Description A reference to an email template. |

WorkflowFieldUpdate

Represents a workflow field update.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|--------------------|---|
| EntityDefinition | Type EntityDefinition Properties Filter, Group, Sort. Description Required. Available in API version 34.0. The entity definition for the object associated with this workflow field update. |
| EntityDefinitionId | Type string Properties Filter, Group, Sort Description The ID of the entity containing the workflow field update. |
| FieldDefinition | Type FieldDefinition Properties Filter, Group, Sort |

| Field | Details |
|-------------------|--|
| | Description Required. The definition of this field. |
| FieldDefinitionId | Type string Properties Filter, Group, Sort Description The ID of the field for the workflow field update. |
| FullName | Type string Properties Create, Group, Nillable Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |
| LiteralValue | Type string Properties Filter, Group, Nillable, Sort Description If the update uses a literal value, this is that value. |
| LookupValueId | Type ID Properties Filter, Group, Nillable, Sort Description If the update looks up a value, this lookup value is referenced. |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort Description Indicates the manageable state of the specified component that is contained in a package: <ul style="list-style-type: none"> • beta |

| Field | Details |
|---------------------|---|
| | <ul style="list-style-type: none"> deleted deprecated deprecatedEditable installed installedEditable released unmanaged |
| Metadata | <p>Type mns:WorkflowFieldUpdate</p> <p>Properties Create, Nillable, Update</p> <p>Description The workflow field update metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> <p>Description The name of the workflow field update.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, Nillable, Sort</p> <p>Description The namespace of the package containing the workflow field update object.</p> |
| SourceTableEnumOrId | <p>Type picklist</p> <p>Properties Filter, Group, Restricted picklist, Sort</p> <p>Description The enum (for example, Account) or ID of the object this workflow field update is on.</p> |

WorkflowOutboundMessage

Represents an outbound message. An outbound message sends information to a designated endpoint, like an external service. Outbound messages are configured from Setup. You must configure the external endpoint and create a listener for the messages using the SOAP API.

This object is available in API version 32.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Fields

| Field | Details |
|--------------------|---|
| ApiVersion | Type double Properties Filter, Sort Description The API version is automatically generated and set to the current API version when the outbound message was created. |
| EntityDefinition | Type EntityDefinition Properties Filter, Group, Sort. Description Required. Available in version 34.0. The entity definition for the object associated with this WebLink. |
| EntityDefinitionId | Type string Properties Filter, Group, Sort Description The ID of the entity containing the outbound message. |
| FullName | Type string |

| Field | Details |
|-------------------|---|
| | <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata object in Metadata API.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| IntegrationUserId | <p>Type ID</p> <p>Properties Filter, Group, Sort</p> <p>Description The ID of the user under which this message is sent.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Metadata | <p>Type mns:WorkflowOutboundMessage</p> <p>Properties Create, Nillable, Update</p> <p>Description Outbound message definition metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |

| Field | Details |
|-----------------|--|
| Name | Type string Properties Filter, Group, idLookup, Sort Description The name of the outbound message. |
| NamespacePrefix | Type string Properties Filter, Group, Nillable, Sort Description The namespace of the package containing the outbound message. |

WorkflowRule

Represents a workflow rule that is used to fire off a specific workflow action when the specified criteria is met. Includes access to the associated WorkflowRule object in Salesforce Metadata API.

Available from API version 30.0 or later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST HTTP Methods

Query, DELETE, GET, PATCH, POST

Fields

| Field Name | Details |
|------------|---|
| FullName | Type string Properties Create, Group, Nillable Description The full name of the associated metadata object in Metadata API. |

| Field Name | Details |
|-----------------|---|
| | <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| ManageableState | <p>Type ManageableState enumerated list</p> <p>Properties Filter, Group, Nillable, Restricted picklist, Sort</p> <p>Description Indicates the manageable state of the specified component that is contained in a package:</p> <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Metadata | <p>Type mns : WorkflowRule</p> <p>Properties Create, Nillable, Update</p> <p>Description Workflow rule metadata.</p> <p>Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance.</p> |
| Name | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The enum name or ID of entity this rule is associated with.</p> |
| NamespacePrefix | <p>Type string</p> <p>Properties Filter, Group, idLookup, Sort</p> |

| Field Name | Details |
|---------------|---|
| | Description The namespace of the package containing the workflow rule object. |
| TableEnumOrId | Type picklist Properties Filter, Group, Restricted picklist, Sort Description The enum (for example, Account) or ID of the object for this workflow rule. |

WorkflowTask

Represents a workflow task that is used to fire off a specific workflow action when the specified criteria is met. Includes access to the associated WorkflowRule object in Salesforce Metadata API.

Available from API version 32.0 or later.

Supported SOAP Calls

`create()`, `delete()`, `query()`, `retrieve()`, `search()`, `update()`, `upsert()`

Supported REST HTTP Methods

Query, DELETE, GET, PATCH, POST

Fields

| Field Name | Details |
|--------------------|---|
| EntityDefinition | Type EntityDefinition Properties Filter, Group, Sort. Description Required. The entity definition for the object associated with the validation rule. |
| EntityDefinitionId | Type string Properties Filter, Group, Sort |

| Field Name | Details |
|-----------------|---|
| | Description The ID of the entity containing the workflow task. |
| FullName | Type string Properties Create, Group, Nillable Description The full name of the associated metadata object in Metadata API. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |
| ManageableState | Type ManageableState enumerated list Properties Filter, Group, Nillable, Restricted picklist, Sort Description Indicates the manageable state of the specified component that is contained in a package: <ul style="list-style-type: none"> • beta • deleted • deprecated • deprecatedEditable • installed • installedEditable • released • unmanaged |
| Metadata | Type mns : WorkflowTask Properties Create, Nillable, Update Description Workflow task metadata. Query this field only if the query result contains no more than one record. Otherwise, an error is returned. If more than one record exists, use multiple queries to retrieve the records. This limit protects performance. |
| NamespacePrefix | Type string |

| Field Name | Details |
|------------|--|
| | Properties Filter, Group, Nillable, Sort Description The namespace of the package containing the workflow task object. |
| Priority | Type picklist Properties Filter, Group, Sort Description The task's priority. Values are: <ul style="list-style-type: none"> • High • Normal • Low |
| Status | Type picklist Properties Filter, Group, Sort Description The task's status. Values are: <ul style="list-style-type: none"> • Not Started • In Progress • Completed • Waiting on someone else • Deferred |
| Subject | Type string Properties Filter, Group, idLookup, Sort Description A subject for the workflow task. It is used if an email notification is sent when the task is assigned. |

WorkSkillRouting

Represents a setup object that stores a set of WorkSkillRoutingAttribute objects used to route a work item to an agent who has the skills necessary to take the work. Available in API version 46.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods


DELETE, GET, PATCH, POST

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|---------------|---|
| DeveloperName | <p>Type string</p> <p>Properties Filter, Group, Sort</p> <p>Description The developer name for the WorkSkillRouting.</p> <p> Note: Only users with View DeveloperName OR View Setup and Configuration permission can view, group, sort, and filter this field.</p> |
| FullName | <p>Type string</p> <p>Properties Create, Group, Nillable</p> <p>Description The full name of the associated metadata type in Metadata API.</p> |
| IsActive | <p>Type boolean</p> <p>Properties Defaulted on create, Filter, Group, Sort</p> <p>Description Indicates whether assignment rules are active and can be evaluated.</p> |
| Language | <p>Type picklist</p> |

| Field | Details |
|---------------|--|
| | Properties Defaulted on create, Filter, Group, Nillable, Restricted picklist, Sort Description The language in the user's personal settings. |
| MasterLabel | Type string Properties Filter, Group, Sort Description Master label for this object. This display value is the internal label that is not translated. |
| Metadata | Type mns:WorkSkillRouting Properties Create, Nillable, Update Description The associated metadata type in Metadata API. |
| RelatedEntity | Type picklist Properties Filter, Group, Restricted picklist, Sort, Unique Description Type of Salesforce object that the attributes are associated with. |

WorkSkillRoutingAttribute

Represents a setup object that stores metadata related to the routing assignments between object field values and skills. Field values are used to route a work item to an agent who has the skills necessary to take the work. Available in API version 46.0 and later.

Supported SOAP Calls

`create()`, `delete()`, `describeSObjects()`, `query()`, `retrieve()`, `update()`, `upsert()`

Supported REST HTTP Methods

DELETE, GET, PATCH, POST

Limitations

[SOQL Limitations](#) on page 35

[SOSL Limitations](#) on page 36

Fields

| Field | Details |
|-------------------|--|
| Field | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The field corresponding to the field values that the skill is mapped to. Skills-Based Routing Rules support fields of type picklist, lookup, and checkbox. For example, Case Reason, Case Type, and Escalated. To see the complete list of valid values representing supported fields, see the Tooling API WSDL.</p> |
| IsAdditionalSkill | <p>Type boolean</p> <p>Properties Create, Defaulted on create, Filter, Group, Sort, Update</p> <p>Description In skills-based routing, you can set some skills to <code>additional</code>. After a designated timeout period, a skill marked as <code>additional</code> is dropped from Omni-Channel routing. The case is then routed to the best-matched agent, even if the agent doesn't have all the skills.</p> |
| RelatedEntity | <p>Type picklist</p> <p>Properties Create, Filter, Group, Restricted picklist, Sort, Update</p> <p>Description The type of object being routed. Valid values are:</p> <ul style="list-style-type: none"> • Case • ContactRequest • Lead • Order • SocialPost • Custom |
| SkillLevel | <p>Type double</p> |

| Field | Details |
|--------------------|---|
| | <p>Properties Create, Defaulted on create, Filter, Nillable, Sort, Update</p> <p>Description Level of the skill required. This value can range from 0 to 10.</p> |
| SkillPriority | <p>Type int</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description For additional skills, specify the order in which a skill is dropped if after the Drop Additional Skills Timeout on the routing configuration, no agent with that skill is available. Skills with a lower priority rank (9 or 10) are dropped first. Skills with a higher priority rank (0 or 1) are dropped last. Skills with the same priority value are dropped as a group. You can set skill priority using skills-based routing rules or Apex code. Available in API version 49.0 and later.</p> |
| Value | <p>Type string</p> <p>Properties Create, Filter, Group, Nillable, Sort, Update</p> <p>Description The field value that is mapped to the selected skill.</p> |
| WorkSkillRoutingId | <p>Type reference</p> <p>Properties Create, Filter, Group, Sort</p> <p>Description The ID of the WorkSkillRouting object with which this field value is associated.</p> |

CHAPTER 5 SOAP Headers for Tooling API

In this chapter ...

- [AllOrNoneHeader](#)
- [AllowFieldTruncationHeader](#)
- [CallOptions](#)
- [DebuggingHeader](#)
- [DisableFeedTrackingHeader](#)
- [MetadataWarningsHeader](#)
- [PackageVersionHeader](#)
- [SessionHeader](#)

Tooling API provides SOAP headers similar to the SOAP API headers.

Control the behavior of SOAP calls:

AllOrNoneHeader

Allows a call to roll back all changes unless all records are processed successfully.

Without the AllOrNoneHeader header, records without errors are committed, while records with errors are marked as failed in the call results. This header is available in API version 20.0 and later.

Even if the header is enabled, it's still necessary to inspect the `success` field in the call result for each record to identify records with errors. Each `success` field contains `true` or `false` indicating whether the call was processed successfully.

If there is an error associated with at least one record, the `errors` field in the call result for the record gives more information on the error. If other records in the same call have no errors, their `errors` fields indicate that they were rolled back due to other errors.

API Calls

`create()`, `delete()`, `undelete()`, `update()`, `upsert()`

Fields

| Element Name | Type | Description |
|------------------------|---------|---|
| <code>allOrNone</code> | boolean | If <code>true</code> , any failed records in a call cause all changes for the call to be rolled back. Record changes aren't committed unless all records are processed successfully. The default is <code>false</code> . Some records can be processed successfully while others are marked as failed in the call results. |

Sample Code—Java

This sample shows how to use the AllOrNoneHeader. It attempts to create two contacts. The second contact doesn't have all required fields set and causes a failure on creation. Next, the sample sets the `allOrNone` field to `true`, and then attempts to create the contacts. Creating one of the contacts results in an error, so the entire transaction is rolled back and no contacts are created.

```
public void allOrNoneHeaderSample() {
    try {
        // Create the first contact.
        SObject[] sObjects = new SObject[2];
        Contact contact1 = new Contact();
        contact1.setFirstName("Robin");
        contact1.setLastName("Van Persie");

        // Create the second contact. This contact doesn't
        // have a value for the required
        // LastName field so the create will fail.
        Contact contact2 = new Contact();
        contact2.setFirstName("Ashley");
        sObjects[0] = contact1;
        sObjects[1] = contact2;

        // Set the SOAP header to roll back the create unless
```

```

// all contacts are successfully created.
connection.setAllOrNoneHeader(true);
// Attempt to create the two contacts.
SaveResult[] sr = connection.create(sObjects);
for (int i = 0; i < sr.length; i++) {
    if (sr[i].isSuccess()) {
        System.out.println("Successfully created contact with id: " +
            sr[i].getId() + ".");
    }
    else {
        // Note the error messages as the operation was rolled back
        // due to the all or none header.
        System.out.println("Error creating contact: " +
            sr[i].getErrors()[0].getMessage());
        System.out.println("Error status code: " +
            sr[i].getErrors()[0].getStatusCode());
    }
}
} catch (ConnectionException ce) {
    ce.printStackTrace();
}
}
}

```

AllowFieldTruncationHeader

Specifies that for some fields, when a string is too large, the operation fails. Without the header, strings for these fields are truncated.

The `AllowFieldTruncationHeader` header affects the following datatypes:

- anyType, if it represents one of the other datatypes in this list
- email
- encryptedstring
- multipicklist
- phone
- picklist
- string
- textarea

In API versions previous to 15.0, if a value for one of the listed fields is too large, the value is truncated.

For API version 15.0 and later, if a value is too large, the operation fails and the fault code `STRING_TOO_LONG` is returned.

`AllowFieldTruncationHeader` allows you to specify that the previous behavior, truncation, be used instead of the new behavior in API versions 15.0 and later.

This header has no effect in versions 14.0 and earlier.

API Calls

`convertLead()`, `create()`, `merge()`, `process()`, `undelete()`, `update()`, and `upsert()`

Apex: `executeanonymous()`

Fields

| Element Name | Type | Description |
|----------------------|---------|---|
| allowFieldTruncation | boolean | <p>If <code>true</code>, truncate field values that are too long, which is the behavior in API versions 14.0 and earlier.</p> <p>Default is <code>false</code>: no change in behavior. If a <code>string</code> or <code>textarea</code> value is too large, the operation fails and the fault code <code>STRING_TOO_LONG</code> is returned.</p> <p>The following list shows the field types affected by truncation and this header:</p> <ul style="list-style-type: none"> • <code>anyType</code>, if it represents one of the other datatypes in this list • <code>email</code> • <code>encryptedstring</code> • <code>multipicklist</code> • <code>phone</code> • <code>picklist</code> • <code>string</code> • <code>textarea</code> |

Sample Code—Java

To create an account with a name that is too long for the `Name` field, use the `AllowFieldTruncation` header.

This sample:

1. Creates an `Account` object with a name that exceeds the field limit of 255 characters.
2. Sends the create call, which fails because of the name field length.
3. Sets the `AllowFieldTruncationHeader` to `true` and retries the account creation, which succeeds.

```
public void allowFieldTruncationSample() {
    try {
        Account account = new Account();
        // Construct a string that is 256 characters long.
        // Account.Name's limit is 255 characters.
        String accName = "";
        for (int i = 0; i < 256; i++) {
            accName += "a";
        }
        account.setName(accName);
        // Construct an array of SObjects to hold the accounts.
        SObject[] sObjects = new SObject[1];
        sObjects[0] = account;
        // Attempt to create the account. It will fail in API version 15.0
        // and above because the account name is too long.
        SaveResult[] results = connection.create(sObjects);
        System.out.println("The call failed because: "
            + results[0].getErrors()[0].getMessage());
        // Now set the SOAP header to allow field truncation.
        connection.setAllowFieldTruncationHeader(true);
    }
}
```



```
// Attempt to create the account now.
results = connection.create(sObjects);
System.out.println("The call: " + results[0].isSuccess());
} catch (ConnectionException ce) {
    ce.printStackTrace();
}
}
```

CallOptions

Specifies the API client identifier.

Version

This call is available in all API versions.

Supported Calls

All Metadata API calls.

Fields

| Field Name | Type | Description |
|------------|--------|--|
| client | string | A value that identifies an API client. |

Sample Code—Java

To change the API client ID, add the `CallOptions` header to the metadata connection before you perform a call as follows:

```
metadataConnection.setCallOptions("client ID");
```

DebuggingHeader

Specifies that the deployment result contains the debug log output, and specifies the level of detail included in the log. The debug log contains the output of Apex tests that are executed as part of a deployment.

Version

This header is available in all API versions.

Supported Calls

`deploy()`

Fields

| Field Name | Type | Description |
|------------|--------------------------------------|---|
| categories | LogInfo [] | A list of log categories with their associated log levels. |
| debugLevel | LogType (enumeration of type string) | <p>Deprecated. This field is provided only for backward compatibility. If you provide values for both <code>debugLevel</code> and <code>categories</code>, the <code>categories</code> value is used.</p> <p>The <code>debugLevel</code> field specifies the type of information returned in the debug log. The values are listed from the least amount of information returned to the most information returned. Valid values include:</p> <ul style="list-style-type: none"> • None • Debugonly • Db • Profiling • Callout • Detail |

LogInfo

Specifies the type and amount of information to be returned in the debug log. The `categories` field takes a list of these objects. LogInfo is a mapping of `category` to `level`.

| Element Name | Type | Description |
|--------------|------------------|--|
| category | LogCategory | <p>Specify the type of information returned in the debug log. Valid values are:</p> <ul style="list-style-type: none"> • Db • Workflow • Validation • Callout • Apex_code • Apex_profiling • Visualforce • System • All |
| level | LogCategoryLevel | <p>Specifies the level of detail returned in the debug log.</p> <p>Valid log levels are (listed from lowest to highest):</p> <ul style="list-style-type: none"> • NONE • ERROR • WARN |

| Element Name | Type | Description |
|--------------|------|--|
| | | <ul style="list-style-type: none"> • INFO • DEBUG • FINE • FINER • FINEST |

Sample Code—Java

Add the `DebuggingHeader` to the metadata connection before you perform the `deploy()` call as follows.

```
LogInfo[] logs = new LogInfo[1];
logs[0] = new LogInfo();
logs[0].setCategory(LogCategory.Apex_code);
logs[0].setLevel(LogCategoryLevel.Fine);
metadataConnection.setDebuggingHeader(logs);
```

The result of the `deploy()` call is obtained by calling `checkDeployStatus()`. After the deployment finishes, and if tests were run, the response of `checkDeployStatus()` contains the debug log output in the `debugLog` field of a `DebuggingInfo` output header.

DisableFeedTrackingHeader

Specifies that changes made in the current call are tracked in feeds.

Use this header if you want to process many records without tracking the changes in various feeds related to the records. This header is available if the Chatter feature is enabled for your organization.

API Calls

`convertLead()`, `create()`, `delete()`, `merge()`, `process()`, `undelete()`, `update()`, `upsert()`

Fields

| Element Name | Type | Description |
|----------------------------------|---------|--|
| <code>disableFeedTracking</code> | boolean | If <code>true</code> , the changes made in the current call are not tracked in feeds. The default is <code>false</code> . |

Sample Code—Java

This sample shows how to use the `DisableFeedTrackingHeader`. It sets this header to `true` to disable feed tracking and then creates many account records in bulk.

```
public void disableFeedTrackingHeaderSample() {
    try {
        // Insert a large number of accounts.
        SObject[] sObjects = new SObject[500];
        for (int i = 0; i < 500; i++) {
            Account a = new Account();
            a.setName("my-account-" + i);
            sObjects[i] = a;
        }
        // Set the SOAP header to disable feed tracking to avoid generating a
        // large number of feed items because of this bulk operation.
        connection.setDisableFeedTrackingHeader(true);
        // Perform the bulk create. This won't result in 500 feed items, which
        // would otherwise be generated without the DisableFeedTrackingHeader.
        SaveResult[] sr = connection.create(sObjects);
        for (int i = 0; i < sr.length; i++) {
            if (sr[i].isSuccess()) {
                System.out.println("Successfully created account with id: " +
                    sr[i].getId() + ".");
            } else {
                System.out.println("Error creating account: " +
                    sr[i].getErrors()[0].getMessage());
            }
        }
    } catch (ConnectionException ce) {
        ce.printStackTrace();
    }
}
```

MetadataWarningsHeader

Allows you to save metadata even if warnings are returned.

Version

This header is available in API version 35.0 and later.

Supported Calls

`delete()`, `update()`, `upsert()`

Field

| Field Name | Type | Description |
|--------------------|---------|--|
| ignoreSaveWarnings | boolean | <p>If <code>true</code>, you can save metadata such as a flow even if there are warnings, but not if there are errors.</p> <p>See also Allow Metadata Save Operations to Complete with Returned Warnings</p> |

PackageVersionHeader

Specifies the package version for each installed managed package.

A managed package can have several versions with different content and behavior. This header allows you to specify the version used for each package referenced by your API client.

If a package version isn't specified, the API client uses the version of the package specified in Setup. From Setup, enter *API* in the **Quick Find** box, select **API**, and then click **Configure Enterprise Package Version Settings** under **Enterprise Package Version Settings**.

This header is available in API version 16.0 and later.

Associated API Calls

`convertLead()`, `create()`, `delete()`, `describeGlobal()`, `describeLayout()`, `describeSObject()`, `describeSObjects()`, `describeSoftphoneLayout()`, `describeTabs()`, `merge()`, `process()`, `query()`, `retrieve()`, `search()`, `undelete()`, `update()`, `upsert()`

Fields

| Element Name | Type | Description |
|-----------------|-----------------------------------|--|
| packageVersions | PackageVersion [] | A list of package versions for installed managed packages referenced by your API client. |

PackageVersion

Specifies a version of an installed managed package. A package version is *majorNumber.minorNumber*, for example `2.1`.

Fields

| Field | Type | Description |
|-------------|--------|--|
| majorNumber | int | The major version number of a package version. |
| minorNumber | int | The minor version number of a package version. |
| namespace | string | The unique namespace of the managed package. |

Sample Code—Java

This sample sets the package version for one installed package in the `PackageVersionHeader`. Next, it executes the code passed into this method via the `executeAnonymous` Apex method.

```
public void PackageVersionHeaderSample(String code) throws Exception
{
    _PackageVersionHeader pvh = new _PackageVersionHeader();
    PackageVersion pv = new PackageVersion();
    pv.setNamespace("installedPackageNamespaceHere");
    pv.setMajorNumber(1);
    pv.setMinorNumber(0);
    // In this case, we are only referencing one installed package.
    PackageVersion[] pvs = new PackageVersion[]{pv};
    pvh.setPackageVersions(pvs);

    apexBinding.setHeader(new SforceServiceLocator().getServiceName().getNamespaceURI(),
        "PackageVersionHeader", pvh);
    // Execute the code passed into the method.
    ExecuteAnonymousResult r = apexBinding.executeAnonymous(code);
    if (r.isSuccess()) {
        System.out.println("Code executed successfully");
    }
    else {
        System.out.println("Exception message: " + r.getExceptionMessage());
        System.out.println("Exception stack trace: " + r.getExceptionStackTrace());
    }
}
```

SessionHeader

Specifies the session ID returned from the login server after a successful `login()`. This session ID is used in all subsequent calls.

In version 12.0 and later, include the API namespace in the SOAP message associated with this header. The namespace is defined in the enterprise or partner WSDL.

API Calls

All calls, including utility calls.

Fields

| Element Name | Type | Description |
|--------------|--------|---|
| sessionId | string | Session ID returned by the <code>login()</code> call to be used for subsequent call authentication. |

Sample Code

See the examples provided for `login()`.

CHAPTER 6 REST Headers for Tooling API

In this chapter ...

- [Call Options Header](#)
- [Limit Info Header](#)
- [Package Version Header](#)
- [Query Options Header](#)

Tooling API provides a subset of the REST headers available in REST API.

Control the behavior of REST requests:

Call Options Header

Specifies options for the client you're using to access REST API resources. For example, you can provide a default namespace prefix so that you don't need to specify the prefix in your code.

The Call Options header can be used with sObject Basic Information, sObject Rows, sObject Rows by External ID, Query, QueryAll, and Search. It is also supported in Bulk API and Bulk API 2.0.

Header Field Name and Values

Field name

`Sforce-Call-Options`

Field values

- `client`—A string used as an identifier for the client sending the request. This string appears in log files, helping you keep track of which client sent a request.
- `defaultNamespace`—A developer namespace prefix used as the default namespace for the request. With this header field, the request resolves field names in managed packages without specified namespaces. (Not supported in Bulk API.)

Example

If the developer namespace prefix is `battle`, and you have a custom field called `botId` in a package, set the default namespace with the call options header:

```
Sforce-Call-Options: client=caseSensitiveToken; defaultNamespace=battle
```

Then queries such as the following succeed:

```
/services/data/vXX.X/query/?q=SELECT+Id+botId__c+FROM+Account
```

In this case, the actual field queried is the `battle__botId__c` field.

Using this header allows you to write client code without having to specify the namespace prefix. In the previous example, without the header you must write `battle__botId__c`.

If this field is set, and the query also specifies the namespace, the response doesn't include the prefix. For example, if you set this header to `battle`, and issue a query like `SELECT+Id+battle__botId__c+FROM+Account`, the response uses a `botId__c` element, not a `battle__botId__c` element.

The `defaultNamespace` field is ignored when retrieving describe information, which avoids ambiguity between namespace prefixes and customer fields of the same name.

Limit Info Header

This response header is returned in each request to REST API (except for calls to the Versions URI, `/`, which do not count towards your org's limit). You can use the information to monitor API limits.

Header Field Name and Values

Field name

`Sforce-Limit-Info`

Field values

- `api-usage`—Specifies the daily API usage for the organization against which the call was made. The first number is the number of API calls used, and the second number is the API limit for the organization.

The values returned in the header represent standard REST API limits and usage, except when calls are made using Salesforce Functions. Calls made using Salesforce Functions draw from a Functions-specific allocation.

Example

```
Sforce-Limit-Info: api-usage=10018/100000
```

Package Version Header

Specifies the version of each package referenced by a client. A package version is a number that identifies the set of components and behavior contained in a package. This header can also be used to specify a package version when making calls to an Apex REST web service.

The Package Version header can be used with the following resources: Describe Global, sObject Describe, sObject Basic Information, sObject Rows, sObject Layouts, Query, QueryAll, Search, and sObject Rows by External ID.

Header Field Name and Values

Field name and value

`x-sfdc-packageversion-[namespace]: xx.x`, where `[namespace]` is the unique namespace of the managed package and `xx.x` is the package version.

Example

```
x-sfdc-packageversion-clientPackage: 1.0
```

Query Options Header

Specifies options used in a query, such as the query results batch size. Use this request header with the Query resource.

Header Field Name and Values

Field name

```
Sforce-Query-Options
```

Field values

- `batchSize`—A numeric value that specifies the number of records returned for a query request. Child objects count toward the number of records for the batch size. For example, in relationship queries, multiple child objects are returned per parent row returned.

The default is 2,000; the minimum is 200, and the maximum is 2,000. There is no guarantee that the requested batch size is the actual batch size. Changes are made as necessary to maximize performance.

Example

```
Sforce-Query-Options: batchSize=1000
```

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