


Connecting to Salesforce with DataBridger

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Generating a WSDL File from Salesforce

Salesforce makes available a WSDL file, which allows third-party programs like DataBridger to communicate with your Salesforce organization. The following instructions apply to both Salesforce Classic and Salesforce Lightning. You will need the *Customize Application* permission assigned to your Salesforce user account. (See [Salesforce Help](#)).

1. Log in to the Salesforce organization you would like to connect DataBridger to at salesforce.com
2. Go to **Setup**:
 - a. If using Salesforce Classic, click your name in the upper-right corner then click Setup
 - b. If using Salesforce Lightning, click the gear icon in the upper-right corner  then click Setup
3. Type “API” in the **Quick Find** box (do not press Enter)
4. Click on **API** under **Develop** (Salesforce Classic) or under **Integrations** (Salesforce Lightning)
5. Under **WSDL and Client Certificates** > **Enterprise WSDL**, click **Generate Enterprise WSDL**
6. Click **Generate**
7. Wait for the WSDL file to load, then save the web page (e.g. by pressing CTRL+S) to a location DataBridger can access

Granting API Access

DataBridger requires API access to read and write to Salesforce. For security purposes, Salesforce requires one of the following two conditions to be met in order to access your Salesforce organization via the API:

- The public IP address of your company’s network is assigned as a trusted IP in your Salesforce organization

- Your security token is appended to your password when logging into Salesforce through the API

[Read this article to set trusted IP ranges for your Salesforce organization.](#)

Your security token is sent to you from Salesforce by email. If you do not have your security token, you must reset it to acquire a new one.

[Read this article to reset your security token.](#)

Opening a Salesforce Data Source

Create a data source in DataBridger that will allow you to read and write to your Salesforce organization.

1. Click the Open Data Source button
 - a. Provide a name
 - b. Select *XML file* from the data source type dropdown
 - c. Make sure **Local database/file** is selected
2. Click OK
 - a. For **XML File Name** insert an asterisk (*). This tells DataBridger that the XML File is a reference to a data source
 - b. Select **Read existing XML File**
 - c. Select **Use Virtual Tables**
 - d. Select **Use SOAP Access (Beta test feature)**. Read the message that appears and click **OK**
 - e. Choose *SFORCE* from the **Authorization Model** dropdown
 - f. For **SOAP User**, enter your Salesforce username
 - g. For **SOAP Password**, enter your password, including your security token if necessary. For example, if your password is "pass" and your security token is "token", insert "passtoken"
 - h. Leave **SOAP Account** blank
 - i. For **WSDL File/URL**, insert the path of the previously downloaded WSDL file

3. Click **OK**. DataBridger connects to your Salesforce organization.

Adding Virtual Tables

After connecting to Salesforce, you'll notice there are no tables under its data source listing in the tree. In DataBridger, data is read and written to cloud sources like Salesforce through virtual tables, which are authored in DataBridger Studio and stored in the DataBridger Studio repository. Unlike database tables, virtual tables for Salesforce represent actions (such as query, create or update) to be performed on objects (such as Account, Contact, or Opportunity), supplied by your Salesforce organization's WSDL file. If you wanted to read and write to the same object, you would create at least two virtual tables, because virtual tables are designated either for reading (to be used as a load source) or writing (to be used as a load target).

Retrieving Records in Salesforce

To get started, you'll retrieve existing account records in your Salesforce organization by adding a Query virtual table.

1. Right-click the Salesforce data source in the tree view and select **Add Virtual Table**
2. Choose **query** from the service list
3. Make sure **Virtual table is for Reading** is selected below the service list
4. Click **OK**
5. Change the **name** of the virtual table to *queryAccount*

The virtual table window has two views, one for the API request and one for the API response. You can switch between the request and response using the buttons near the top:



6. Switch to the request view by clicking on the request button (right)

The query request contains the [SOQL](#) query string, which specifies the object and fields to return from Salesforce.

7. Enter the following query into the **Value** cell, including the surrounding quotes, to specify the object and fields to retrieve from Salesforce

```
"SELECT ID, NAME, PHONE, TYPE FROM ACCOUNT"
```

8. Switch to the response view (left button)
9. Select **Use Data for Layout** above the table grid
10. Check the box under the **Expand** column to reveal the elements within the result object
11. In the **records** row, check the box under the **Rows** column to reveal the fields

The preview pane on the lower half of the Virtual Table window should display the records returned by the SOQL query.

12. Uncheck the box next to *size* to remove it from the result
13. Click **Save and Close**

The virtual table contains Account records from your Salesforce organization and is ready to be fed into other data sources.

Creating Records in Salesforce

Next we'll create records in Salesforce with a load script that reads data from a sample file into a *create* virtual table.

Add the sample data source

1. Download [this sample CSV file](#) or copy and paste the following table into a new CSV file. Save the file to a place where DataBridger has access.
2. Add a CSV Data Source
 - Use the downloaded CSV file
 - Enable Field Names (bottom-left corner of dialog box)

Add a *Create* Virtual Table

1. Right-click the Salesforce data source in the tree view and select **Add Virtual Table**
2. Choose **create** from the service list
3. Select **Virtual table is for Writing** below the service list
4. Click **OK**
5. Change the **name** of the virtual table to *createAccount*
6. Switch to the request view (right button) if it isn't already active
7. Expand *sObjects* (inside the table)
8. Select the *Account* extension
9. Click **OK**

The window is populated with a list of available fields and related objects for the Account object for your organization. The checkboxes in the *Column* column specify whether the field should be included in the virtual mapping. You should only include fields that you plan on supplying data to. By default, all fields are included.

10. Deselect all fields by clicking the first checkbox in the *Column* column (*Id*), scrolling down to the bottom and shift-clicking the last checkbox in the *Column* column.
11. Select the *Name* field and any other fields required by your organization by clicking the corresponding box in the *Column* column. (Do not select *Id*; the ID is generated automatically by Salesforce)

Required fields vary between organizations. Consult your Salesforce admin or review the New Account dialog box in your organization on salesforce.com for a list of required fields.

12. Switch to the response view (left button)
13. Expand the result by clicking the checkbox in the *Expand* column
14. Click **OK**
15. Click **Save and Close**

The *createAccount* virtual table is created. There is no data in the preview area because this is a virtual table for writing.

Create a Load Mapping

1. Click and drag the *createAccount* virtual table onto **Load Mappings**. A dialog box appears
2. Select the sample CSV data source as the primary source and click **Next**. The mapping grid opens
3. Make sure the target field *NAME* is mapped to the expression *NAME*. (The expression may be surrounded by curly braces)
4. Map the rest of the target fields to their corresponding source fields by clicking the **Criteria** button. In the Expression Builder, click the source table from the left area, then double-click the corresponding field from the center area. You may customize the expression while in the Expression Builder, making it as complex or simple as you see fit.
5. Click **Save and Close**
6. Click **End**

Run the Load Script

1. Click and drag the *createAccount* load mapping onto **Load Scripts**. The Create Load Script dialog box appears
2. Click **OK**
3. Right-click the newly created load script and select **Save and Run Script Locally**
4. Click **Save**, overwriting any existing scripts if necessary. The load script runs, and the accounts are loaded into Salesforce

You can view the new accounts on Salesforce.com, or by selecting the *queryAccount* virtual table from the tree view, if present.