

# Setting Up Salesforce Connect to Consume an OData Service API

## Introduction

This page describes how to set up and configure Salesforce Connect (formerly Salesforce Lightning Connect) to securely consume an OData Service API and display the data in real-time. The example shown will expose and display data from an SAP source using the OData 2.0 protocol.



### Prerequisites:

1. Your Salesforce Org must be provisioned to access the Salesforce Connect modules including external data sources and external objects.
2. [Create a New Project](#) in [Design Studio](#).
3. [Create a Jitterbit Entity](#) in [Design Studio](#).
4. [Create an API Entity Operation](#) in [Design Studio](#).
5. [Create an OData Service API](#) in [API Manager](#).

## Creating an External Data Source and External Object in Salesforce

1. Log in to your Salesforce Org. Within the panel on the left side of the page, scroll down to **Build**, select **Develop**, and select [External Data Sources](#). You will need access to these features to set up Salesforce Connect. If you do not have access to these features, contact your Salesforce representative:

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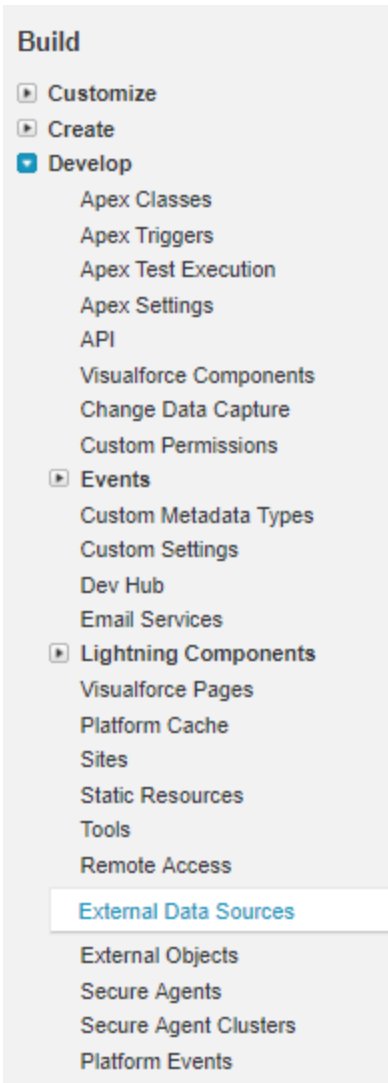
### Related Articles

- [API Jitterbit Variables](#)
- [API Manager Quick Start Guide](#)
- [APIs Tech Talk](#)
- [Configuring Outbound Messages with Harmony API](#)
- [Creating an API Entity Operation](#)
- [Creating a Jitterbit Entity](#)
- [Creating an OData Service API](#)
- [Design Studio Quick Start Guide](#)
- [Environments](#)
- [Environments Tech Talk](#)
- [Harmony API Security](#)
- [Jitterbit Security and Architecture White Paper](#)
- [My APIs](#)
- [Salesforce Functions](#)
- [SAP Connector Function](#)

### Related Topics

- [API Manager](#)
- [Design Studio](#)
- [Management Console](#)
- [Salesforce Wizards](#)
- [SAP Connector](#)

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2. Click the **New External Data Source** button:

New External Data Source [Help for this Page](#)

Connect to another Salesforce org or a third-party database or content system.

Save Save and New Cancel

External Data Source:

Name:

Type:

**Parameters**

URL:

Connection Timeout (Seconds):

Writable External Objects:

High Data Volume:

Request Row Counts:

Enable Search:

Format:

CSRF Protection:

Server Driven Pagination:

Compress Requests:

Custom Query Options for Salesforce Search:

Special Compatibility:

**Authentication**

Certificate:

Identity Type:

Authentication Protocol:

Username:

Password:

Save Save and New Cancel

- Required fields display a red vertical bar to the left of the field.
- **External Data Source:** Enter the **Name** of the OData Service API into the **External Data Source** field.
- **Name:** Press the **Tab** key. The Name field is automatically populated with the name of the OData Service API. The API **External Data Source** and **Name** can be the same.
- **Type:** Click in the **Type** field and select **Salesforce Connect: OData 2.0** in the dropdown list.

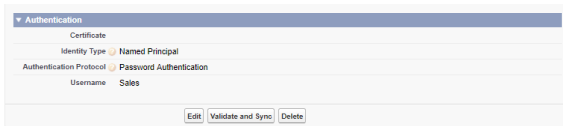
**NOTE:** Jitterbit Harmony currently only supports OData 2.0.

- **URL:** Enter or paste the full **URL** of your OData Service API into the **URL** field. (On the *My APIs* page in *API Manager*, hover over the API card and click on the **Copy URL** link.)

**NOTE:** Make sure that the URL starts with HTTPS (and not HTTP). If you are using an HTTP URL, the data will not be protected when requested and sent back to Salesforce.

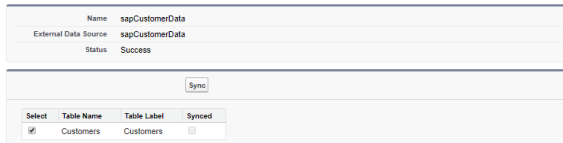
- **Writable External Objects:**
  - Check this box if you want to allow Salesforce to POST, PUT, DELETE, or MERGE data in the SAP or database source using the OData Service API. In this case, multiple operations will be assigned to the API which are assigned one or more of these methods.
  - Leave this box unchecked for read-only access. In this case, the operation method in the OData Service API must be set to GET.
- **Identity Type:** Click in this field and select **Named Principal** in the dropdown list if you do have profiles assigned to the API and if you want to use a central name for all of your Salesforce users.
- **Authentication Protocol:** Click in this field and select the appropriate **Authentication Protocol** from the dropdown list based on the security profile assigned to the API.
  - Additional fields display depending on the protocol selected.
  - In the example shown above, **Password Authentication** was selected and **Username** and **Password** fields displayed. Enter the appropriate **Username** and **Password**.
- Click **Save**.

3. Scroll down to the **Authentication** section. Click the **Validate and Sync** button:



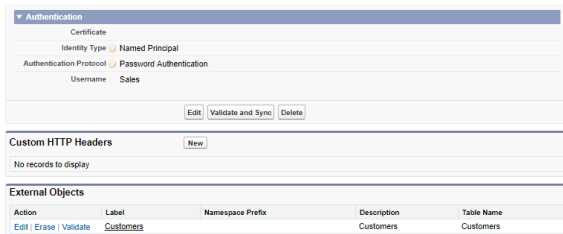
4. The **Validate External Data Source** page displays:

Validate External Data Source: sapCustomerData  
 Confirm that you can connect to the external system, and synchronize its schema with your Salesforce org.  
[Back to External Data Source: sapCustomerData](#)



- Click the appropriate **checkbox** to select the **Table Name**. In this example, Customers was selected.
- Click on the **Sync** button to check the URL, validate that the format is acceptable, and automatically create a new **External Object** in Salesforce.

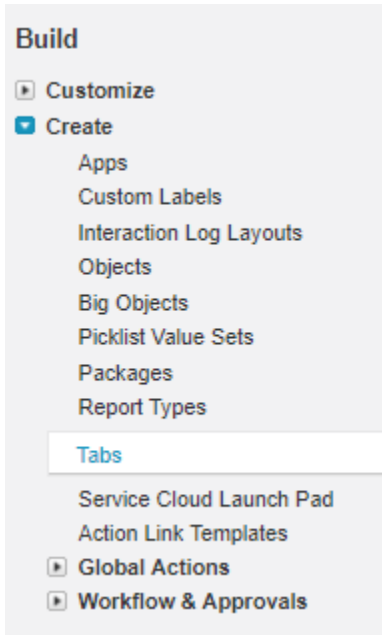
5. Scroll down to the **Authentication** section:



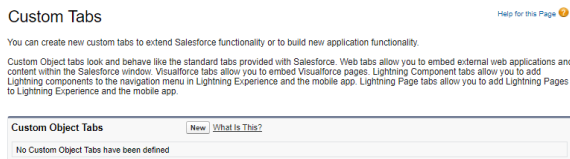
- The **External Objects** section displays the new External Object you created.
- Salesforce external objects are similar to other custom objects except that the data is not stored in Salesforce. The data is retrieved in real-time from the data source. The external object supports APIs and other customization. When using an external object, remember to always provide a filter to refine the data.
- See the Salesforce documentation [Define External Objects](#) for additional information about Salesforce external objects.

## Creating a New Custom Tab in Salesforce

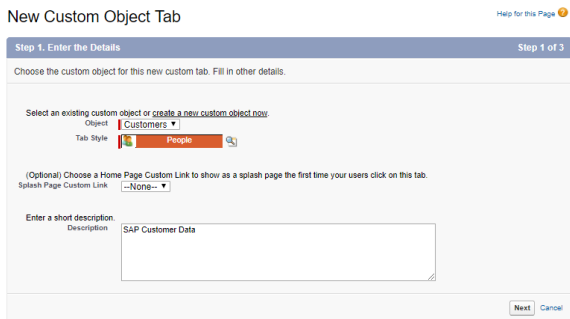
1. Within the panel on the left side of the page, scroll down to **Build**, select **Create**, and select **Tabs**:



2. Scroll down to the **Custom Object Tabs** section and click **New** to create a new tab in Salesforce:

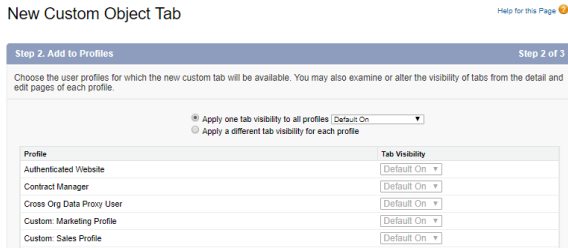


3. **New Custom Object Tab, Step 1 of 3:**



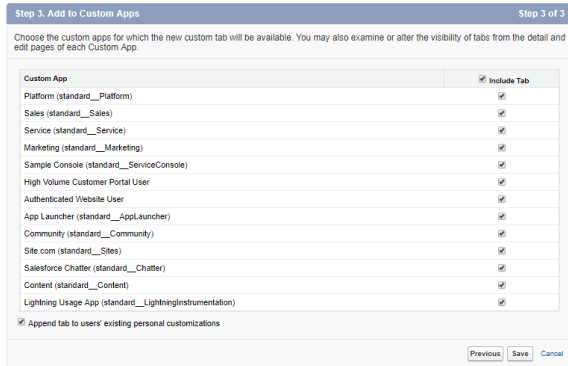
- **Object:** Click in the **Object** field and select the **new external object** you created from the dropdown list. In this example, Customers was selected.
- **Tab Style:** Click the **Tab Style** field to display a popup containing style options. Select a **tab style** in the popup.
- **Description:** Enter a short description of the external object.
- Click **Next**.

4. **New Custom Object Tab, Step 2 of 3:**



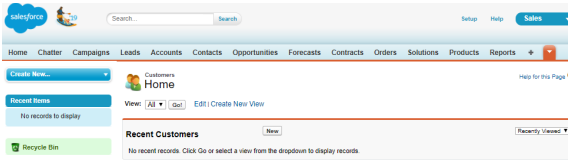
- Customize Tab Visibility with Profiles as desired. In this example, **Tab Visibility** is set to **Default On** for all Profiles.
- Click **Next**.

5. **New Custom Object Tab, Step 3 of 3:**



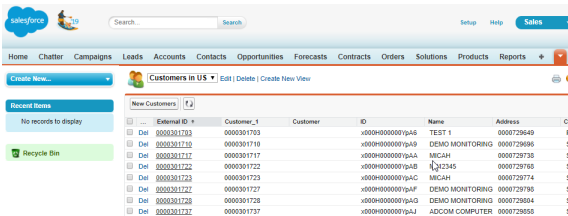
- Select the **Custom Apps** for which the new custom tab will be available by clicking on the associated **checkboxes**. All apps are included in the above example.
- Click **Save**.

6. Click on **Home** in the top toolbar:



- If your new tab does not automatically display, click on the **plus sign** on the right side of the toolbar to list all tabs.
- Click on the **new tab** you created (in this example *Customers*).
- Click on **Create New View**
- Customize the **View** as desired. Enter a **Name** for the view.
- Click **Save**.

7. In the example shown in the image below, the **Customers in US** view is set to display all customers where **Country = US**:



- The data is retrieved in real-time and is not being stored in Salesforce.
- You can drill down for more detail or change filters as needed.
- **Jitterbit Harmony API Manager** will continue to service the requests in real-time and work together with Salesforce Connect to provide access to the data.

Additional Salesforce Connect Resources

These resources from Salesforce documentation may be helpful:

- [Salesforce Connect](#)
- [Set Up Salesforce Connect](#)
- [Access External Data With Salesforce Connect](#)
- [Work With External Data Sources](#)
- [Define External Objects](#)