

Sitecore Connect for Salesforce CRM 4.0 Installation Guide

How to install and configure Sitecore Connect for Salesforce CRM 4.0

August 14, 2020



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1. Install on a content management or standalone server

This section covers how to install Sitecore Connect for Salesforce CRM on a content management or standalone server.

1.1. Prerequisites

Before you install Sitecore Connect for Salesforce, you must have:

- Sitecore Experience Platform 9.3.
- Sitecore Data Exchange Framework 4.0.
- Access to a Salesforce CRM instance and a user account on Salesforce - at a minimum, this account must have rights to read data from Salesforce. To write data to Salesforce, the account must also have rights to write data to Salesforce.
- Network connectivity - you must install on a Sitecore server that has network connectivity to your Salesforce instance. This can require firewall configuration, based on your network setup.

1.2. Install Sitecore Connect for Salesforce

To install Sitecore Connect for Salesforce, download and install the following package from the [Sitecore download page](#):

- Sitecore Connect for Salesforce CRM 4.0

1.3. Deploy the xConnect collection model

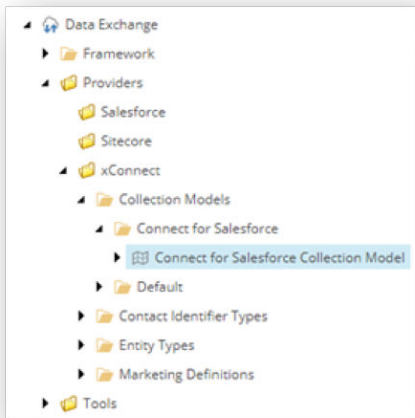
Sitecore Connect adds new facets to associate information from Salesforce with Sitecore contacts and interactions. You must deploy a collection model that defines these new facets to xConnect.

NOTE

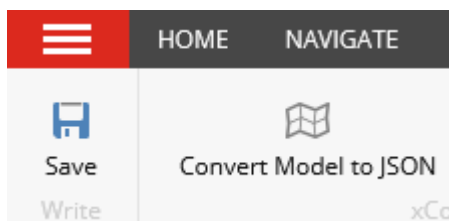
For more information on how to deploy a custom collection model to xConnect, see the xConnect developer documentation.

To deploy the xConnect collection model:

1. In Sitecore, open the Content Editor.
2. Navigate to `sitecore/system/Settings/Data Exchange/Providers/xConnect/Collection Models/Connect for Salesforce/Connect for Salesforce Collection Model`.



3. On the ribbon, click **Convert Model to JSON**.



4. Your browser downloads a JSON file. Save this file to your local machine.
5. Deploy the JSON file to your xConnect Collection server, in the `\App_Data\Models` folder.
6. Deploy the JSON file to your xConnect indexing server. You have to copy the JSON file to two folders:
 - `\App_Data\Models\`
 - `\App_Data\jobs\continuous\IndexWorker\AppData\Models\`

1.4. Configure the Salesforce Connected App

To make Salesforce Connect communicate with Salesforce, you must configure the Salesforce Connected app.

NOTE

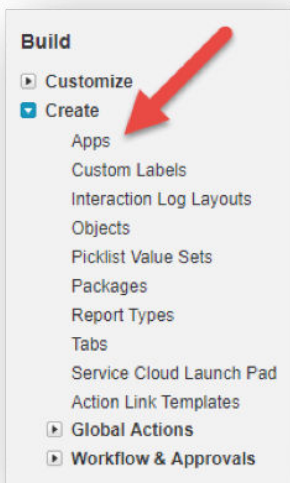
These instructions assume you are using the Salesforce Classic user interface. The same configuration is available using the Salesforce Lightning user interface. We recommend you switch to the Salesforce Classic user interface temporarily to complete these steps.

To configure the Salesforce Connected app:

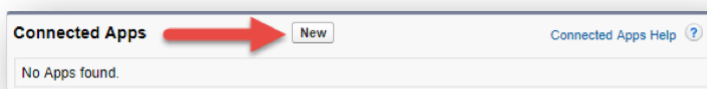
1. Log in to your Salesforce account.
2. On the top menu, click Setup.



3. In the left menu, click **Create** and then click **Apps**.



4. In the **Connected Apps** section, click **New**.

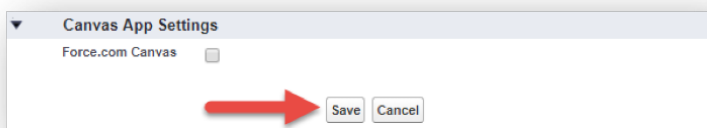


5. Enter the following values:

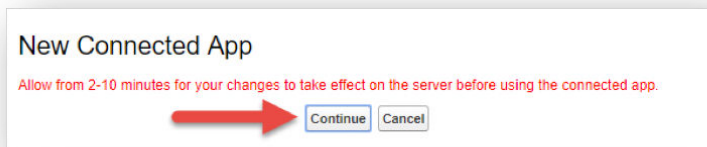
Field name	Value	Notes
Connected App Name	Sitecore Data Exchange App	The specific value does not matter.
API Name	Sitecore_Data_Exchange_App	Salesforce generates this value based on the app name. It is recommended that this value not be changed.

Field name	Value	Notes
Contact Email	[your email address]	The specific value does not matter.
Enable OAuth Settings	Selected	
Callback URL	http://localhost	This value is not used, so the value you enter does not matter.
Selected OAuth Scopes	Access and manage your data (api)	
Require Secret for Web Server Flow	Selected	

6. At the bottom of the screen, click **Save**.



7. Salesforce informs you that a new connected app was created. Click **Continue**.



1.5. Add a custom field in Salesforce (optional)

If you plan to write contact data from Sitecore to Salesforce, you must add a custom field in Salesforce. This field is used to associate the Salesforce contact with the corresponding Sitecore contact.

NOTE

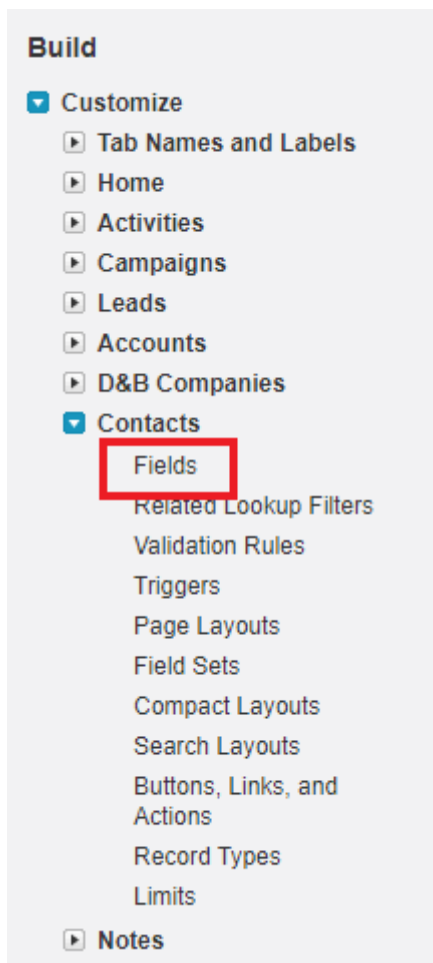
These instructions assume you are using the Salesforce Classic user interface. The same configuration is available using the Salesforce Lightning user interface. We recommend you switch to the Salesforce Classic user interface temporarily to complete these steps.

To add a custom field in Salesforce:

1. Log in to your Salesforce account. On the top menu, click **Setup**.



2. In the left menu, open the `Build/Customize/Contacts` node. Click **Fields**.



3. In the **Contact Custom Fields & Relationships** section, click **New**. In the **New Custom Field** dialog, select **Text** as the data type. Click **Next**.

Contact Help for this Page

New Custom Field

Step 1

Next Cancel

Specify the type of information that the custom field will contain.

Data Type

None Selected Select one of the data types below.

Auto Number A system-generated sequence number that uses a display format you define. The number is automatically incremented for each new record.

Formula A read-only field that derives its value from a formula expression you define. The formula field is updated when any of the source fields change.

Roll-Up Summary A read-only field that displays the sum, minimum, or maximum value of a field in a related list or the record count of all records listed in a related list.

Lookup Relationship Creates a relationship that links this object to another object. The relationship field allows users to click on a lookup icon to select a value from a popup list. The other object is the source of the values in the list.

External Lookup Relationship Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.

Checkbox Allows users to select a True (checked) or False (unchecked) value.

Currency Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.

Date Allows users to enter a date or pick a date from a popup calendar.

Date/Time Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the popup, that date and the current time are entered into the Date/Time field.

Email Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass emails.

Geolocation Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.

Number Allows users to enter any number. Leading zeros are removed.

Percent Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.

Phone Allows users to enter any phone number. Automatically formats it as a phone number.

Picklist Allows users to select a value from a list you define.

Picklist (Multi-Select) Allows users to select multiple values from a list you define.

Text Allows users to enter any combination of letters and numbers.

4. In the **Enter the details** dialog, enter the following values:

- **Data Type** - *Text*
- **Field Label** - *Sitecore Id*
- **Length** - *36*
- **Field Name** - *SitecoreId*
- **External ID** - *selected*

Step 2 of 4

Previous Next Cancel

Field Label

Please enter the maximum length for a text field below.

Length

Field Name

Description

Help Text

Required Always require a value in this field in order to save a record

Unique Do not allow duplicate values

Treat "ABC" and "abc" as duplicate values (case insensitive)
 Treat "ABC" and "abc" as different values (case sensitive)

External ID Set this field as the unique record identifier from an external system

Default Value

Use formula syntax. Enclose text and picklist value API names in double quotes ("the_text"), include numbers without quotes (25), show percentages as decimals (0.10), and express date calculations in the standard format: (Today() + 7). To reference a field from a Custom Metadata type record use: \$CustomMetadata.Type__notRecordAPIName.Field__c

Previous Next Cancel

5. Click **Next**. In the **Establish field-level security** dialog, click **Next**. In the **Add to page layouts** dialog, click **Save**.

6. In the left menu, open the `Build/Customize/Activities` node. Click **Activity Custom Fields**.
7. In the **Activity Custom Fields** section, click **New**. In the **New Custom Field** dialog, select **Text** as the data type. Click **Next**.
8. In the **Enter the details** dialog, enter the following values:
 - **Data Type** - *Text*
 - **Field Label** - *SitecoreId*
 - **Length** - *36*
 - **Field Name** - *SitecoreId*
 - **Unique** - selected
 - **Treat "ABC" and "abc" as duplicate values (case insensitive)** - selected
 - **External ID** - selected
9. Click **Next**. In the **Establish field-level security** dialog, click **Next**. In the **Add to page layouts** dialog, click **Save**.

1.5.1. Include anonymous contacts

By default, synchronization does not include anonymous contacts. To enable synchronization of anonymous contacts, you must:

1. In the `wwwroot\<sitecoreInstanceName>_xconnect\App_Data\jobs\continuous\IndexWorker\App_data\config\sitecore\SearchIndexer\` folder, open the `sc.Xdb.Collection.IndexerSettings.xml` file.
2. Locate the `Sitecore\XConnect\SearchIndexer\Services\IndexerSettings\Options\IndexAnonymousContactData` node, and set it to `true`.
3. Save the configuration file.

2. Install on a content delivery server

The connector includes extra features that you can use on your Sitecore content delivery (CD) server, such as personalization rules or Forms integration. In order to use these features, you must install Sitecore Connect for Salesforce CRM on your CD server.

NOTE

You only need to install the connector on your CD server if you want to use the extra features.

2.1. Prerequisites

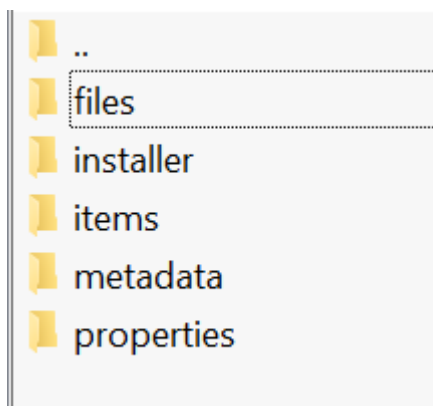
Before you install Sitecore Connect for Salesforce CRM on your CD server, you must have:

- Sitecore Experience Platform 9.3
- Data Exchange Framework 4.0.

2.2. Installation

The CD server does not have an interface to install Sitecore packages, so you must install the necessary files manually. To do so:

1. Download the Sitecore Connect for Salesforce CRM 4.0 package.
2. In the package file, open the `package.zip` file. The files in the `package.zip` file are in the following structure:



3. Extract the files in the `files` folder into the website root folder of your CD server.

NOTE

When you extract the files you must preserve the folder structure from the `files` folder. For example, the `files` folder in the zip contains a subfolder named `bin`, and the files in this folder must go in the `<website>\bin` folder on your CD server.

4. Restart the CD server.

3. Upgrade a content management or standalone server

This section describes how to upgrade a content management or standalone server from Sitecore Connect for Salesforce (SCS) 3.0 to 4.0.

3.1. Prerequisites

Before you upgrade SCS you must have the following installed:

- Sitecore Experience Platform 9.3
- Sitecore Connect for Salesforce 3.0
- Sitecore Data Exchange Framework (DEF) 4.0

NOTE

If you have a previous version of DEF installed, you must upgrade it to 4.0 before upgrading SCS.

3.2. Install the upgrade

To upgrade SCS, you must:

1. Download and install the Sitecore Connect for Salesforce CRM 4.0 Update Package.
2. Deploy the xConnect collection model.

NOTE

If you have created tenants in version 3.0 of the connector, the tenants will work as usual after the upgrade. You do not need to upgrade them.

4. Upgrade a content delivery server

Before you upgrade Sitecore Connect for Salesforce CRM on your content delivery (CD) server, you must have:

- Sitecore Experience Platform 9.3
- Data Exchange Framework 4.0.

4.1. Installation

The CD server does not have an interface to install Sitecore update packages, so you must update the files manually.

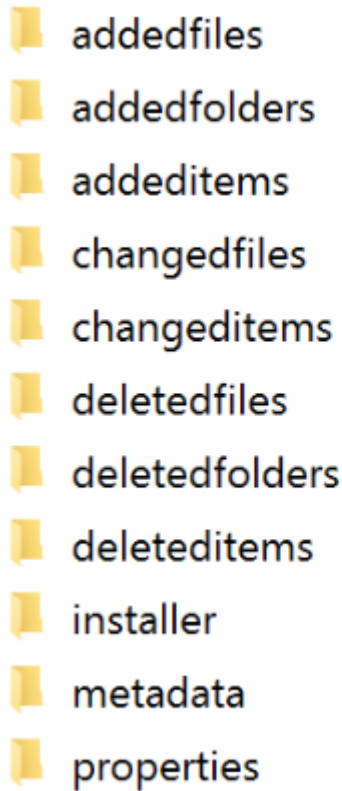
NOTE

For all of the following file operations you must preserve the folder structure from the zip file folders. For example, if the `changedfiles` folder in the zip file contains a `bin` subfolder, the files from this folder must go in the `<website>\bin` folder on your CD server.

To perform the upgrade:

1. Download the Sitecore Connect for Salesforce CRM 4.0 update package.

2. In the update package file, open the `package.zip` file. The files in the `package.zip` file are in the following structure:

**NOTE**

The actual update package may not contain all of the folders shown in the image.

3. Add the folders in the `addedfolder` folder into the website root folder of your CD server.
4. Add the files in the `addedfiles` folder into the website root folder of your CD server.
5. Delete the folders in the `deletedfolder` folder from the website root folder of your CD server.
6. Delete the files in the `deletedfiles` folder from the website root folder of your CD server.
7. Add the files in the `changedfiles` folder into the website root folder of your CD server, overwriting the existing files.
8. Restart the CD server.

5. Configuration

This section covers basic configuration options for Sitecore Connect for Salesforce.

5.1. Get connection string values from Salesforce

Before you can configure the connection string, you must collect the following values from Salesforce:

- **User ID** - the ID that Sitecore uses to call the Salesforce API. This user ID does not have to have administrator rights, but it must have sufficient rights to perform the activities you expect to be able to from Sitecore. For example:
 - To have Salesforce contacts created in Sitecore, the user must have read-access on contacts and campaigns.
 - To push contact data from Sitecore into Salesforce, the user must have write-access on contacts.
- **Password** - the password for the Salesforce user that Sitecore uses to call the Salesforce API.

NOTE

The password must not contain the ; character (semicolon).

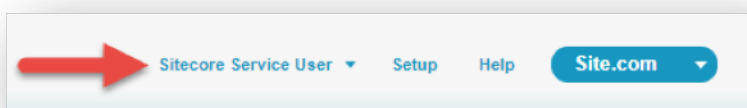
- **Security token**
- **Client ID and secret key**

5.1.1. Get the security token value

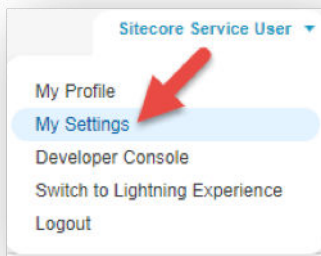
The security token value comes from the Salesforce user who used the connected app.

To get the security token:

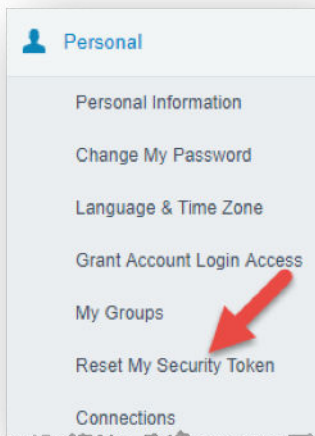
1. In Salesforce, log in with the user ID you plan to use in the connection string.
2. In the top menu, click the user name.



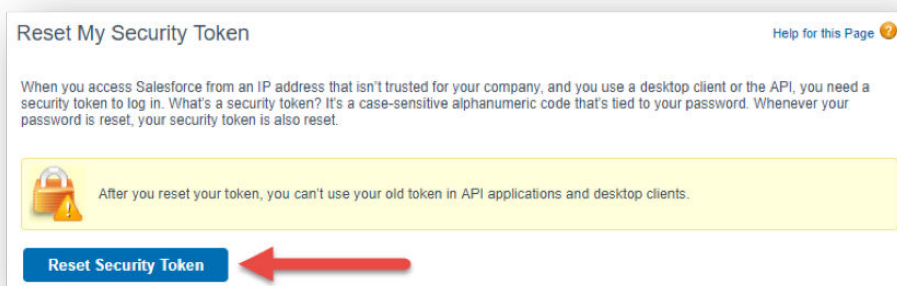
3. Click **My Settings**.



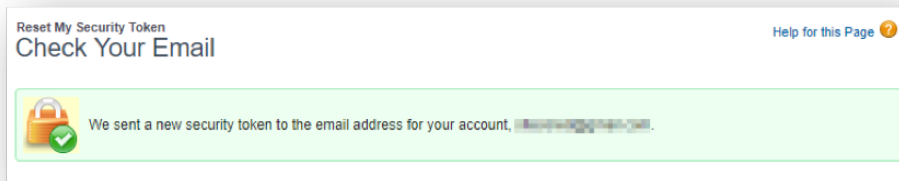
4. In the left menu, click **Personal, Reset My Security Token**.



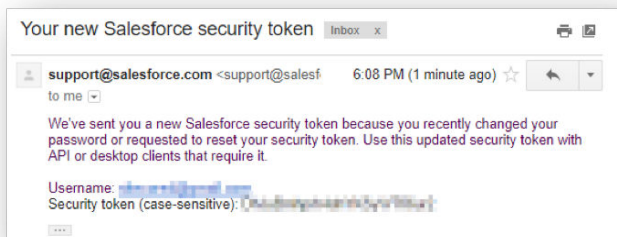
5. Read the warning on the screen carefully and then click **Reset Security Token**.



Salesforce informs you that the new security token will be emailed to you.



6. Check your inbox to find the email message with the new security token value.

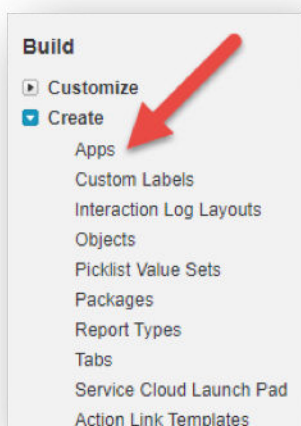


5.1.2. Get the client key and secret key values

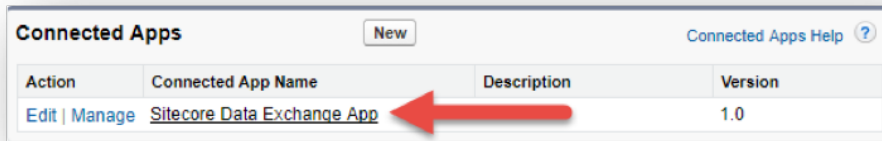
The client key and secret key values come from the Salesforce connected app.

To get these values:

1. In Salesforce, in the left menu, in the **Build** section, expand **Create** and the click **Apps**.



- In the **Connected Apps** section, click the name of the connected app you created.



- In the **API (Enable OAuth Settings)** section, copy the values for the **Consumer Key** and **Consumer Secret**.

NOTE

In the connection string, the Consumer Key value is called the client id, and the Consumer Secret value is called the secret key.

5.2. Add the connection string to Sitecore

When you have collected the connection string values from Salesforce, you must add the connection string to Sitecore.

To add the connection string to Sitecore:

- Add the following connection string to the `ConnectionStrings.config` file on your Sitecore server, replacing the values in brackets with the values you collected from Salesforce:

```
<add name="mysf" connectionString="user id=[user id];password=[password];client id=[client id];secret key=[secret key];security token=[security token]" />
```

The following is an example of what the connection string looks like after you have replaced the values in brackets:

```
<add name="mysf" connectionString="user id=someone@email.com;password=b;client id=GEH9z1TNB8o8BA45pAeDtC8W.DIqrAzuky2uffEEOwtHxIEhLzkmPwjz8KF_vzWY8dNIfurWHpfbZPGdte3b;secret key=5468568999798354123;security token=g3ygFuNzGgm33YTfsM3WKG3AA" />
```

NOTE

If you connect to a Salesforce sandbox, you must add the parameter `sandbox=true` to the connection string.

5.3. Create a tenant

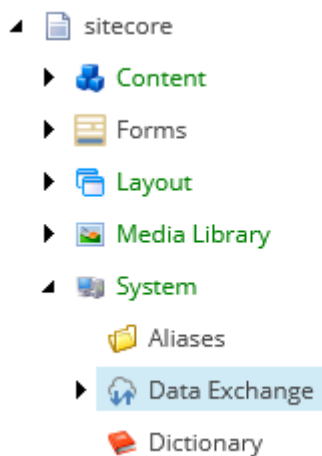
A tenant is the basic unit of configuration in Sitecore Connect for Salesforce. All of the settings that determine how data between Salesforce and Sitecore is synchronized are contained in the tenant.

NOTE

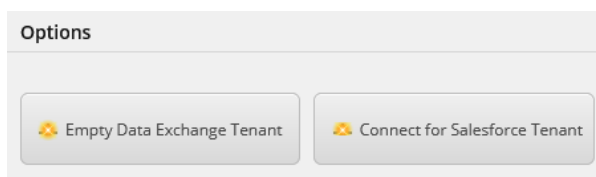
Usually, a tenant represents a specific Salesforce instance. You can configure multiple tenants if you have multiple Salesforce instances you want to connect. It is also possible to configure a single tenant to connect to multiple Salesforce instances. However, that configuration is not covered in this guide.

To create a tenant:

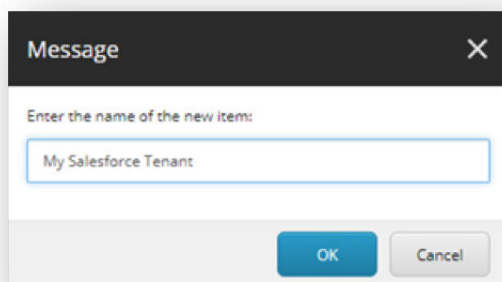
1. In the Content Editor, navigate to `sitecore/system/Data Exchange`.



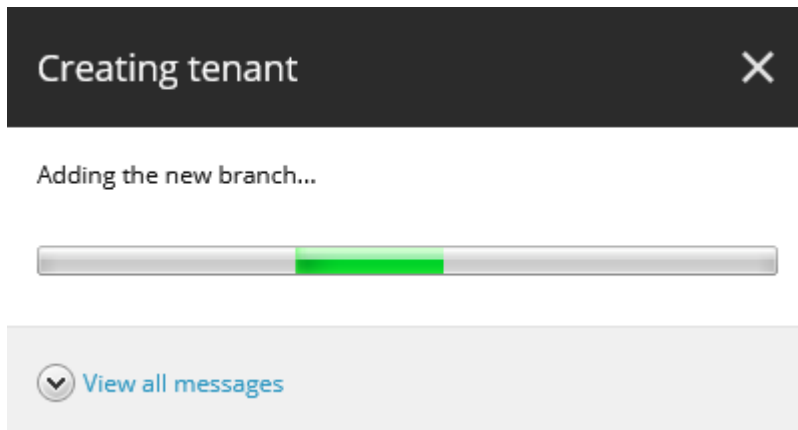
2. To add a new item, click **Connect for Salesforce Tenant**.



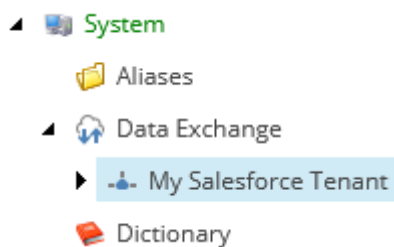
3. Enter a name for the tenant and click **OK**.



Creating the tenant takes some time. As it is created, a progress box appears.



After the tenant is created it appears under `sitecore/System/Data Exchange`.

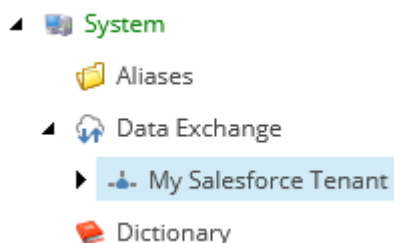


5.4. Enable the tenant

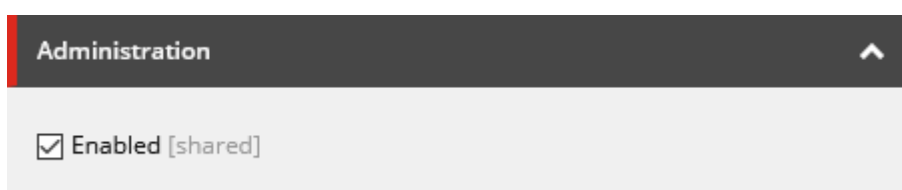
By default, the tenant is disabled. This is to ensure that no synchronization process is run until an administrator makes a conscious decision to enable the tenant.

To enable the tenant:

1. In the Content Editor, select your tenant.



2. On the **Content** tab, in the **Administration** section, select the **Enabled** check box.



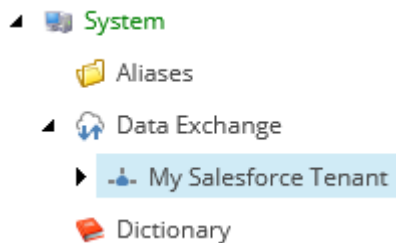
3. Save the item.

5.5. Configure endpoints

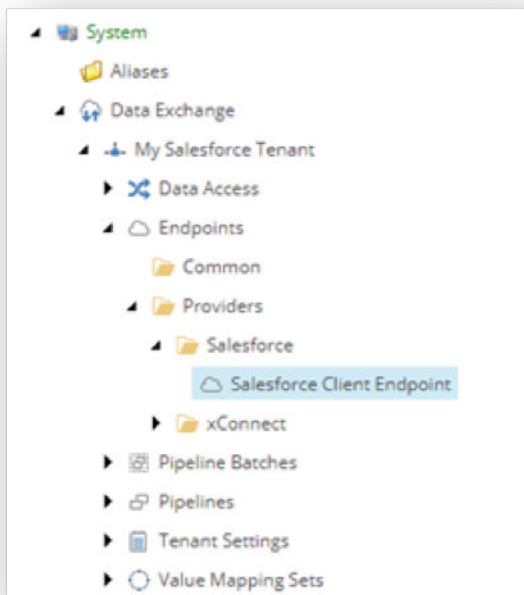
Endpoints are used to identify the source of data that is read and the target of data that is written. Sitecore Connect for Salesforce uses endpoints to represent Sitecore and a Salesforce instance.

To configure endpoints:

1. In the Content Editor, select your tenant.



2. Navigate to Endpoints/Providers/Salesforce/Salesforce Client Endpoint.



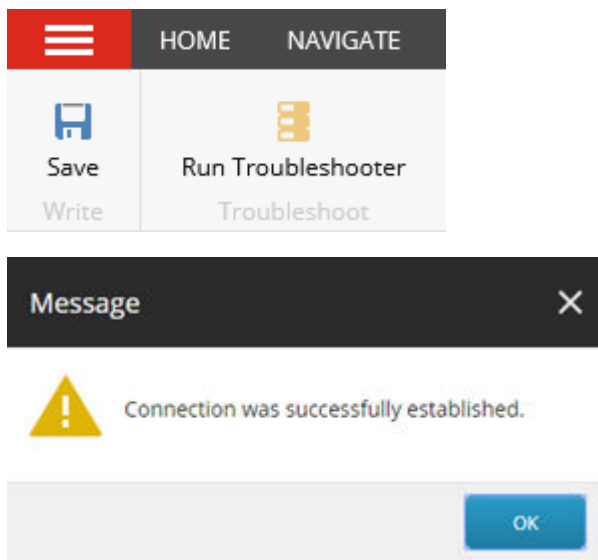
3. In the **Connection String Name** field, enter the name of the [connection string that you added](#) previously.



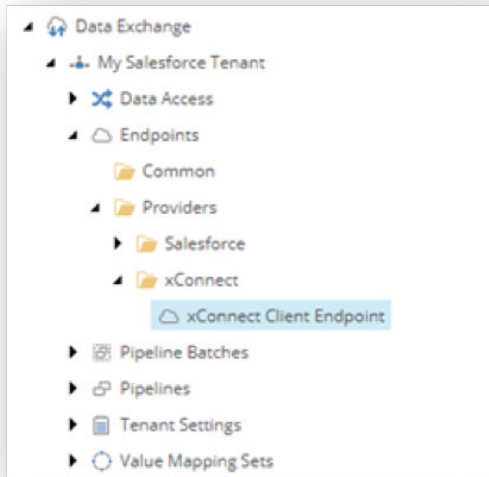
NOTE

If you enter a connection string that is not defined on your Sitecore server, a validation error is displayed.

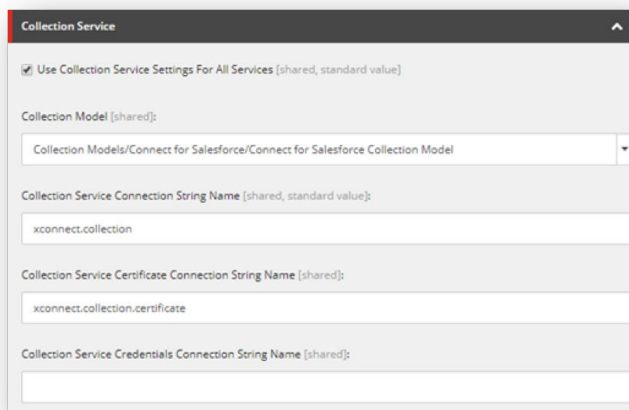
4. Save the item. On the ribbon, in the **Data Exchange** tab, click **Run Troubleshooter**, and in the message that appears to indicate that a connection could be established to your Salesforce instance, click **OK**.



5. Select your tenant and navigate to Endpoints/Providers/xConnect/xConnect Client Endpoint.



6. In the **Collection Service** section, enter values for the following fields:



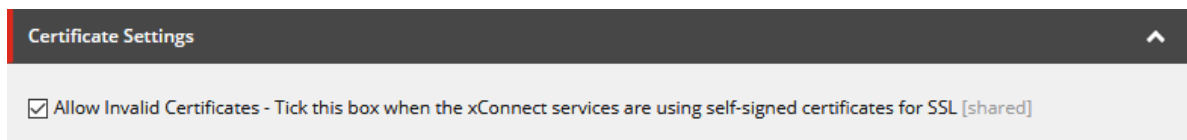
NOTE

All of these values are connection string names from the `ConnectionStrings.config` file on your Sitecore server.

Field name	When required	Description
Collection Service Connection String Name	Always required.	Connection string that identifies the xConnect collection service. By default the value is <code>xconnect.collection</code> .
Collection Service Certificate Connection String Name	Required if SSL is enabled on the xConnect server.	Connection string that identifies the certificate to use when establishing a secure connection to the xConnect server. By default the value is <code>xconnect.collection.certificate</code> .

Field name	When required	Description
Collection Service Credentials Connection String Name	Required if authentication is enabled on the xConnect server.	Connection string that specifies the credentials to use to connect to an xConnect server with authentication enabled. Authentication is not enabled on the xConnect server by default. For more information on supported formats for this connection string, see the Data Exchange Framework developer documentation.

- If your xConnect server is using a self-signed certificate for SSL, select the **Allow Invalid Certificates** check box.



- Save the item. Click **Run Troubleshooter**. A message appears indicating if a connection could be established. Click **OK** to close the message.
- In the same tenant, navigate to `Endpoints/Providers/xConnect/xDB Reference Data Client Endpoint`.
- In the **Settings** section, in the **Client Connection String** field, enter `xdb.referencedata.client`. In the **Client Certificate Connection String**, enter `xdb.referencedata.client.certificate`.
- Save the item. Click **Run Troubleshooter**. A message appears indicating if a connection could be established. Click **OK** to close the message.

If you are planning to write contact data from Sitecore to Salesforce, you must [add a custom field](#). This field is used to associate the Salesforce contact with the corresponding Sitecore contact.

5.6. Run pipeline batches

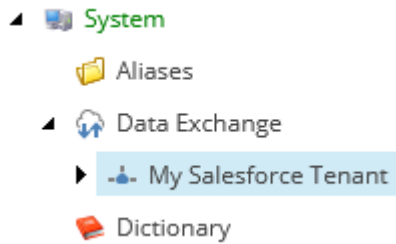
You execute the data synchronization by running the tenant pipeline batches. By default, the pipeline batches are not scheduled to run. For more information on how to run pipeline batches, please refer to the [developer documentation](#) for the Sitecore Data Exchange Framework.

5.7. Enable a Salesforce contact custom field (optional)

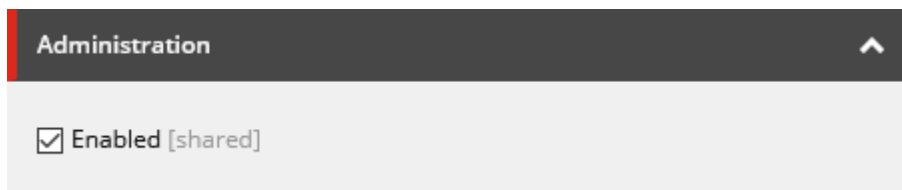
If you are planning to write contact data from Sitecore to Salesforce, you must [add a custom field](#) to Salesforce. You must enable this field on the tenant.

To enable a Salesforce contact custom field:

1. In the Content Editor, select your tenant.



2. Navigate to Data Access/Value Accessor Sets/Providers/Salesforce/Salesforce Contact Fields/Sitecore Id on Salesforce Contact.
3. In the **Administration** section, select the **Enabled** check box.



4. Save the item.

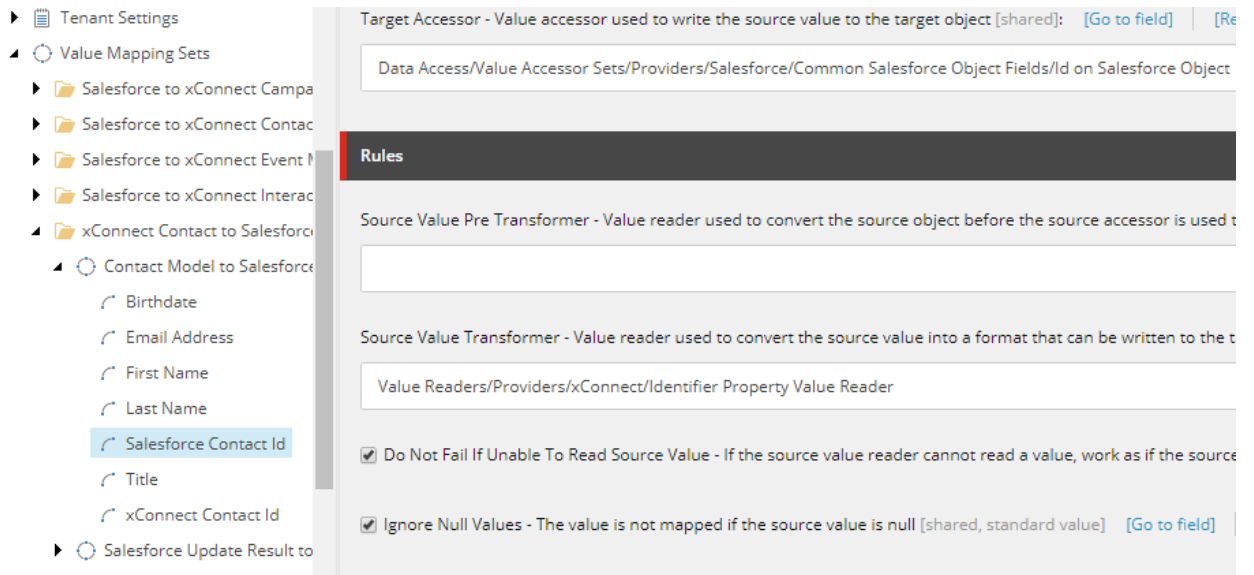
5.8. Prepare an xConnect to Salesforce synchronization

If you synchronize from xConnect to Salesforce CRM, the synchronization might fail the first time you run it, because contacts in xConnect have not yet been assigned a Salesforce Contact ID. To avoid this error, you must enable the *Do Not Fail If Unable To Read Source Value* setting before synchronizing.

To enable the *Do Not Fail* setting:

1. On the Sitecore Launchpad, open the Content Editor.
2. Navigate to the `/sitecore/system/Data Exchange/<tenant>/Value Mapping Sets/xConnect Contact to Salesforce Contact Mappings/Contact Model to Salesforce Contact/Salesforce Contact Id` node.

3. In the **Rules** section, select the **Do Not Fail If Unable To Read Source Value** check box:



The screenshot shows a configuration window for a field named 'Salesforce Contact Id'. The left sidebar lists various mapping sets, with 'Salesforce Contact Id' selected. The main area shows the 'Rules' section, which includes several transformers and readers. The 'Do Not Fail If Unable To Read Source Value' checkbox is checked, and the 'Ignore Null Values' checkbox is also checked.

5.9. Enable indexing for PII sensitive fields

If you synchronize from xConnect to Salesforce CRM, you must enable indexing for personally identifiable information (PII) sensitive fields. The `Read Contacts from xConnect` pipeline step searches **FirstName** and **Email** fields to identify which contacts to process. By default, xConnect does not index these fields for privacy reasons.

NOTE

Before enabling indexing on PII sensitive fields, we encourage you to review the security and data protection features of your chosen search provider (Azure Search or Solr).

If you synchronize from Salesforce CRM to xConnect, you do not have to enable indexing for PII sensitive fields.

To enable indexing:

1. In the `wwwroot\<sitecoreInstanceName>_xconnect\App_Data\Config\Sitecore\SearchIndexer\` folder, open the `sc.Xdb.Collection.IndexerSettings.xml` file.
2. Locate the `Sitecore\XConnect\SearchIndexer\Services\IndexerSettings\Options\IndexPIISensitiveData` node, and set it to `true`:

```
<IndexerSettings>
  <Type>Sitecore.Xdb.Collection.Indexing.IndexerSettings, Sitecore.Xdb.Collection</Type>
  <LifeTime>Singleton</LifeTime>
  <Options>
    <!-- Indexer will split change set on chunks to improve memory consumption. Setting
    this option to 0, a negative value or removing the element completely, results in no
    splitting.-->
    <SplitRecordsThreshold>25000</SplitRecordsThreshold>
```

```
<IndexPIISensitiveData>true</IndexPIISensitiveData>
<IndexAnonymousContactData>>false</IndexAnonymousContactData>
</Options>
</IndexerSettings>
```

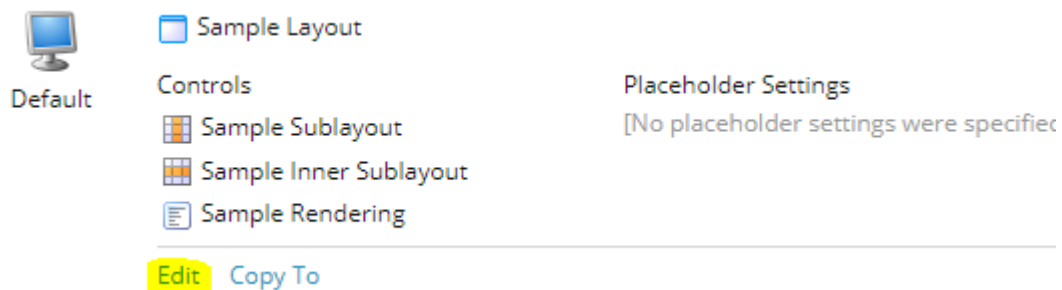
3. In the `wwwroot\<sitecoreInstanceName>_xconnect\App_Data\jobs\continuous\IndexWorker\App_data\config\sitecore\SearchIndexer\` folder, open the `sc.Xdb.Collection.IndexerSettings.xml` file.
4. Locate the `Sitecore\XConnect\SearchIndexer\Services\IndexerSettings\Options\IndexPIISensitiveData` node, and set it to `true`.

5.10. Add personalization to your site

If you have installed Sitecore Connect for Salesforce CRM on a [content delivery server](#), you can add personalization to your site.

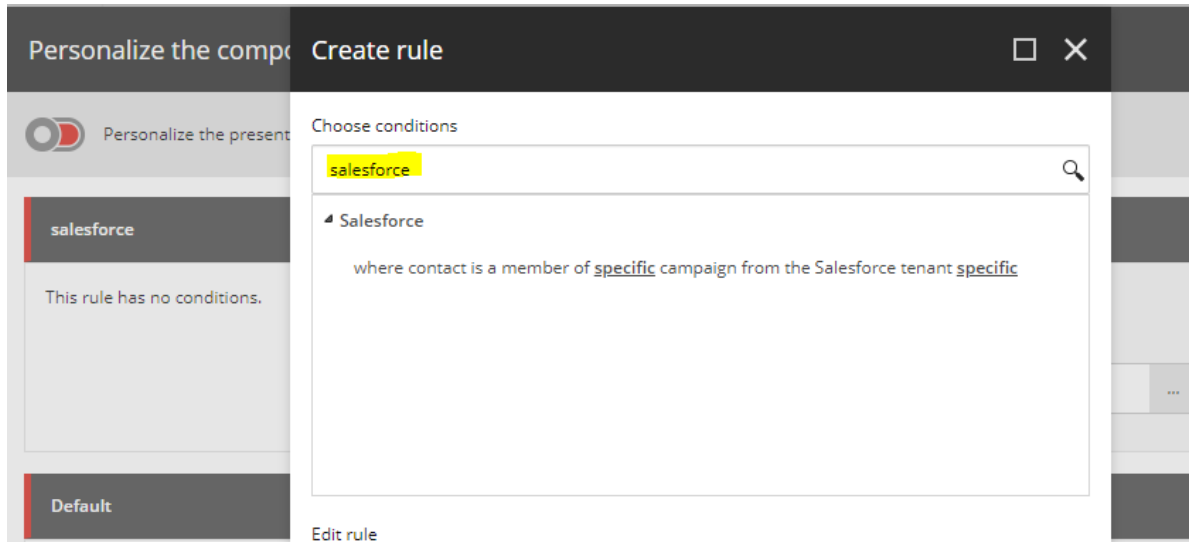
To add personalization:

1. In the Sitecore Content Editor, navigate to the item to which you want to add personalization, for example **/sitecore/content/home**.
2. In the top menu, click **Presentation**, then click **Details**.
3. On the **Default** device, click **Edit**.



4. In the left hand menu, click the **Controls** tab.
5. Select the rendering you want to personalize and click **Personalize**.

6. Add a new rule. In the search field, enter *salesforce* to narrow the results.



7. In the *Salesforce* rule, select the *list* and the *tenant* you want for the personalization.
8. Publish the item, and test that the personalization works as you expect.