

Sitecore Connect for Microsoft Dynamics 365 for Sales 7.0 Installation Guide

How to install and configure Sitecore Connect for Microsoft Dynamics 365 for Sales

November 26, 2021

Table of Contents

1. Install on a content management or standalone server	3
1.1. Prerequisites	3
1.2. Install Sitecore installation package	3
1.3. Install the staging database	4
1.4. Deploy the xConnect collection model	4
2. Install on a content delivery server	6
2.1. Prerequisites	6
2.2. Installation	6
3. Upgrading DCRM to 7.0	8
3.1. Prerequisites	8
3.2. Install the upgrade	8
3.3. Prepare for upgrading DCRM	8
3.4. Upgrade a content management or standalone server	9
3.4.1. Upgrade the existing tenants	10
3.5. Upgrade a content delivery server	10
3.5.1. Installation	10
4. Configuration	13
4.1. Add a connection string for Microsoft Dynamics	13
4.2. Create a tenant	13
4.3. Configure endpoints	15
4.3.1. Configure the Dynamics Organization endpoint	15
4.3.2. Configure the xConnect Client endpoint	16
4.3.3. Configure the xDB Reference Data Client endpoint	18
4.3.4. Configure the Staging Database endpoint	19
4.4. Run pipeline batches	19
4.5. Enable the tenant	19
4.6. Add Microsoft Dynamics personalization to your site	20

1. Install on a content management or standalone server

This chapter covers how to install Sitecore Connect for Microsoft Dynamics on your content management or standalone server.

1.1. Prerequisites

Before you install Sitecore Connect for Microsoft Dynamics, you must have the following:

- **Sitecore Experience Platform** - You must have Sitecore Experience Platform 10.2.
- **Sitecore Data Exchange Framework (DEF)** - You must have DEF 7.0.
- **Microsoft Dynamics** - You must have access to a Microsoft Dynamics instance. Both Microsoft Dynamics 365 and on-premise versions of Microsoft Dynamics are supported. You must also have a Microsoft Dynamics user account that, at a minimum, has rights to read data from Microsoft Dynamics. If you want Sitecore Connect to write data to Microsoft Dynamics, the account must also have rights to write data to Microsoft Dynamics.

NOTE

Sitecore Connect uses the Microsoft XRM tooling to connect to Microsoft Dynamics. A [connection string](#) that is compatible with this tooling is required. Your Microsoft Dynamics administrator can provide the proper connection string.

- **Network connectivity** - You must install Sitecore Connect on a Sitecore server that has network connectivity to your Microsoft Dynamics instance. This can require firewall configuration, based on your network setup.

1.2. Install Sitecore installation package

To install Sitecore Connect for Microsoft Dynamics 365 for Sales, download and install the following package from the [Sitecore download page](#):

- Sitecore Connect for Microsoft Dynamics 365 for Sales 7.0

1.3. Install the staging database

To synchronize the marketing list membership from Microsoft Dynamics as efficiently as possible, Sitecore uses the staging database. This database is used for temporary storage during the synchronization process.

To install the staging database:

1. [Download](#) the Staging Database for Sitecore Connect for Microsoft Dynamics 365 for Sales package, which contains the *Sitecore.DataExchange.Staging.dacpac* data-tier application package.
2. Deploy the dacpac to your SQL Server instance. This creates the staging database.
3. On your Sitecore server, add a connection string for the staging database. Name the connection string *Sitecore.DataExchange.Staging*.

1.4. Deploy the xConnect collection model

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

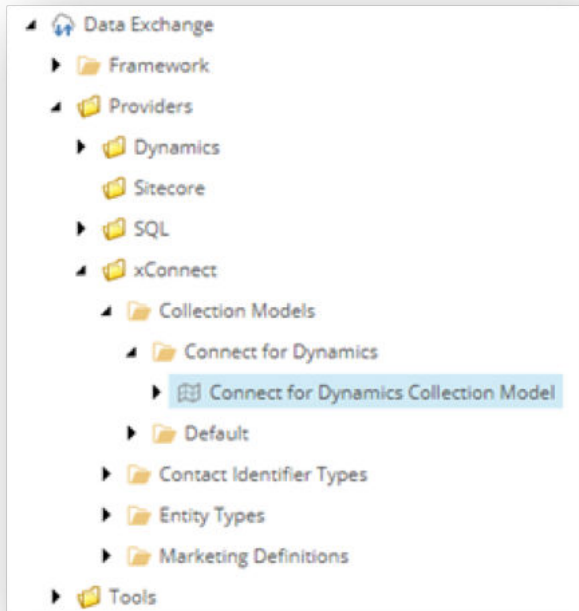
NOTE

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

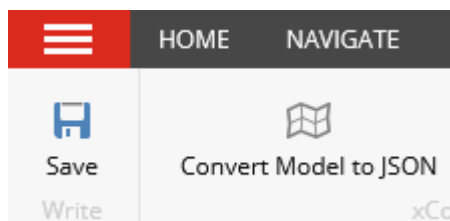
To deploy the xConnect collection model:

1. In Sitecore, open the Content Editor.

2. Navigate to *Connect for Sitecore Collection Model* (sitecore/system/Settings/Data Exchange/Providers/xConnect/Collection Models/Connect for Dynamics/Connect for Dynamics 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\

2. Install on a content delivery server

The connector includes extra features that you can use on your content delivery (CD) server, such as [personalization rules](#) or Forms integration. In order to use these features, you must install Sitecore Connect for Microsoft Dynamics 365 for Sales (DCRM) 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

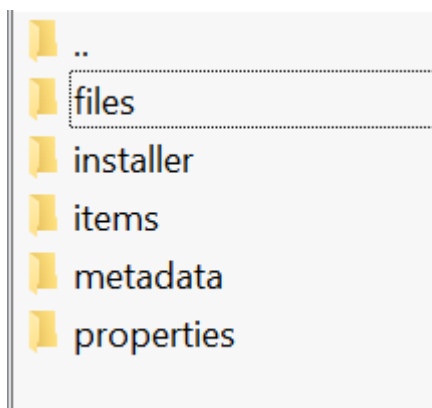
Before you install DCRM on your CD server, you must have the following installed:

- Sitecore Experience Platform 10.2
- Data Exchange Framework 7.0.

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 Microsoft Dynamics 365 for Sales 7.0 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. Upgrading DCRM to 7.0

This section describes how to upgrade your installation from Sitecore Connect for Microsoft Dynamics 365 for Sales (DCRM) to 7.0. The upgrade requires you to update your Sitecore Experience Platform to 10.2.0 and your Data Exchange Framework installation to 7.0.

3.1. Prerequisites

Before you upgrade DCRM you must have the following installed:

- Sitecore Experience Platform 10.1 or earlier
- Sitecore Data Exchange Framework (DEF) 6.0 or earlier
- Sitecore Connect for Microsoft Dynamics 365 for Sales 6.0 or earlier

3.2. Install the upgrade

To upgrade DCRM, you must:

1. Upgrade your Sitecore Experience Platform to 10.2 and your DEF installation to 7.0 using the instructions in the [Prepare for upgrading DCRM](#) section in this guide.
2. Upgrade DCRM on your [content management or standalone](#) servers.
3. If you have installed DCRM on your content delivery servers, upgrade DCRM on the [content delivery](#) servers.

3.3. Prepare for upgrading DCRM

To prepare for upgrading the Sitecore Connect to Microsoft Dynamics 365 for Sales (DCRM) connector to version 7.0, you must

- upgrade Sitecore Experience Platform (SXP) to version 10.2
- upgrade Data Exchange Framework to 7.0
- clean old DCRM items from the SXP content databases

To upgrade Sitecore and DEF and prepare for upgrading DCRM:

1. Download the *Upgrade Guide for Sitecore Experience Platform* for SXP 10.2.0 from the [Sitecore download page](#). Follow the Upgrade Guide to prepare the upgrade and set up the

Sitecore.UpdateApp tool. When you get to the Clean the content databases section, perform the following instructions before continuing with the Upgrade Guide.

2. From the [Resource files for Modules page](#), download the Dynamics CRM Connect Upgrade resources package.
3. Extract the Dynamics CRM Connect Upgrade resources 1.0.0.zip package to a local directory.
4. Open the Dynamics CRM Connect Upgrade resources 1.0.0\<version>\Data folder (for the version you are upgrading from), and copy the .dat files that are included in the core, master, and web folders, to the corresponding folder paths under \Sitecore.UpdateApp\. For example:
 - Copy the Data\Items\master\items.master.dcrm.dat files and paste it in the \Sitecore.UpdateApp\Data\Items\master folder.
 - Copy the Data\Items\web\items.web.dcrm.dat file, and paste it in the \Sitecore.UpdateApp\Data\Items\web folder.

NOTE

Each folder under the path \Sitecore.UpdateApp\Data\Items\ now contains two files, that is, the file you just copied and the items.<master/web/core>.dat file.

5. Add DEF upgrade files to the Sitecore upgrade. For detailed information on how to do this refer to the [DEF 7.0 installation guide](#).
6. When you have added the upgrade files for DCRM, DEF, and any connector modules you have installed, continue with the instructions in the Upgrade Guide to clean up the databases and upgrade your Sitecore installation.

3.4. Upgrade a content management or standalone server

You must upgrade Sitecore Connect for Microsoft Dynamics 365 for Sales (DCRM) to version 7.0 on your content management servers or standalone server.

NOTE

Before upgrading, make sure your system fulfills the [prerequisites](#) for the upgrade, and that you have cleaned the databases according to the instructions in [Prepare for upgrading DCRM](#).

To upgrade DCRM, you must:

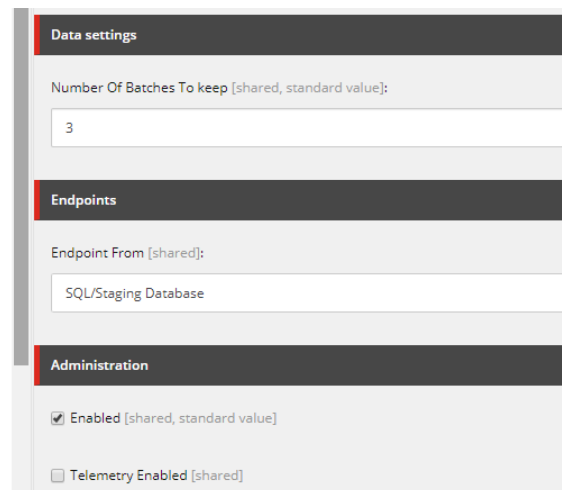
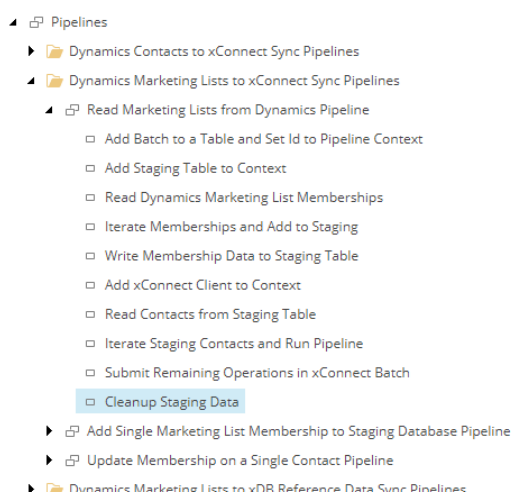
1. Download the Sitecore Connect for Microsoft Dynamics 365 for Sales 7.0 Update Package.
2. In Sitecore, in the control panel, use the **Install an update** wizard to install the update package.
3. Deploy the [xConnect collection model](#).

4. Upgrade your [existing tenants](#).

3.4.1. Upgrade the existing tenants

You can upgrade the tenants you have created with previous versions of the connector. To upgrade a tenant:

1. In the content editor, navigate to the {tenant-to-upgrade}/Pipelines/Dynamics Marketing Lists to xConnect Sync Pipelines/Read Marketing Lists from Dynamics Pipeline/ folder.
2. From the **Insert** menu, use the /sitecore/templates/Data Exchange/Providers/SQL/Pipeline Steps/Cleanup Staging Data template to create a new item. Name it *Cleanup Staging Data*.
3. In the *Cleanup Staging Data* item, in the **Endpoint From** field, select the staging database endpoint. For example:



4. Save the item.

3.5. Upgrade a content delivery server

If you have installed Sitecore Connect for Microsoft Dynamics 365 for Sales (MDS) on your content delivery (CD) servers, you must upgrade these servers to version 7.0.

NOTE

Before upgrading, make sure your system fulfills the [prerequisites](#) for the upgrade, and that you have cleaned the databases according to the instructions in [Prepare for upgrading DCRM](#).

3.5.1. Installation

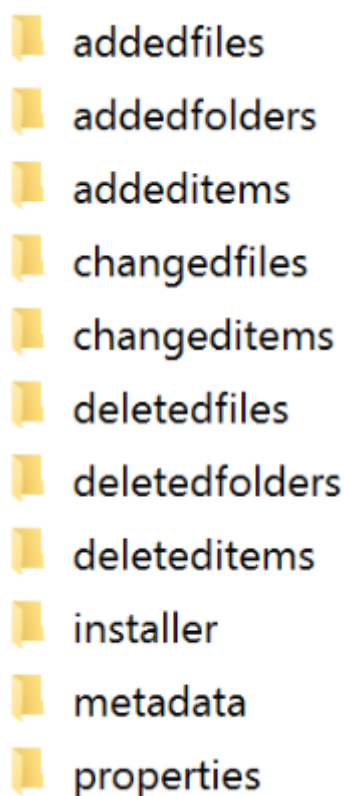
The CD server does not have an interface to install Sitecore update packages, so you must update the files manually.

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 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 Microsoft Dynamics 365 for Sales 7.0 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.

4. Configuration

This chapter covers basic configuration options for Sitecore Connect for Microsoft Dynamics.

4.1. Add a connection string for Microsoft Dynamics

Sitecore Connect connects to a Microsoft Dynamics instance using a connection string.

To add a connection string for Microsoft Dynamics:

- Add the connection string to the `ConnectionStrings.config` file on your Sitecore server. The following is an example of an Office365 authentication type connection string:

```
<add name="mycrm" connectionString="AuthType=Office365; Url=https://<your-organization-name>.crm.dynamics.com; User Id=<your-user-id>; Password=<your-password>" />
```

The following is an example of an OAuth authentication type connection string:

```
<add name="mycrm" connectionString = "AuthType=OAuth; Url=https://<your-organization-name>.crm.dynamics.com;Username=<your-user-id>;Password=<your-password>; AppId=51f81489-12ee-4a9e-aaae-a2591f45987d; RedirectUri=app://58145B91-0C36-4500-8554-080854F2AC97;LoginPrompt=False" />
```

NOTE

Sitecore Connect uses the [connection strings in Microsoft XRM tooling to connect to Microsoft Dynamics](#). You must use a connection string that is compatible with this tooling. Your Microsoft Dynamics administrator can provide the correct connection string.

4.2. Create a tenant

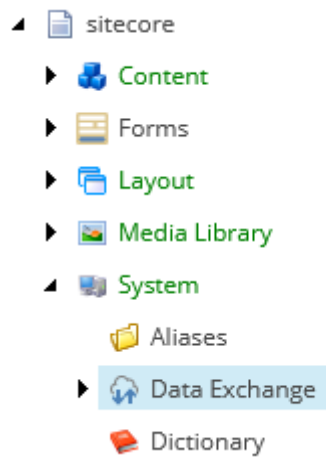
A tenant is the basic unit of configuration in Sitecore Connect. All of the settings that determine how data between Microsoft Dynamics and Sitecore is synchronized are contained in the tenant.

NOTE

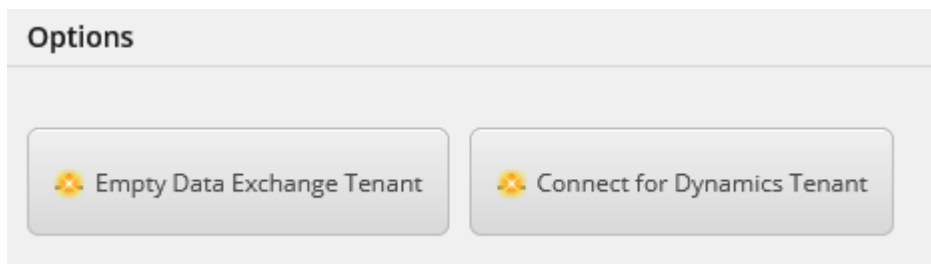
Usually, a tenant represents a specific Microsoft Dynamics instance. You can configure multiple tenants if you have multiple Microsoft Dynamics instances you want to connect. It is also possible to configure a single tenant to connect to multiple Microsoft Dynamics instances. However, that configuration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

To create a tenant:

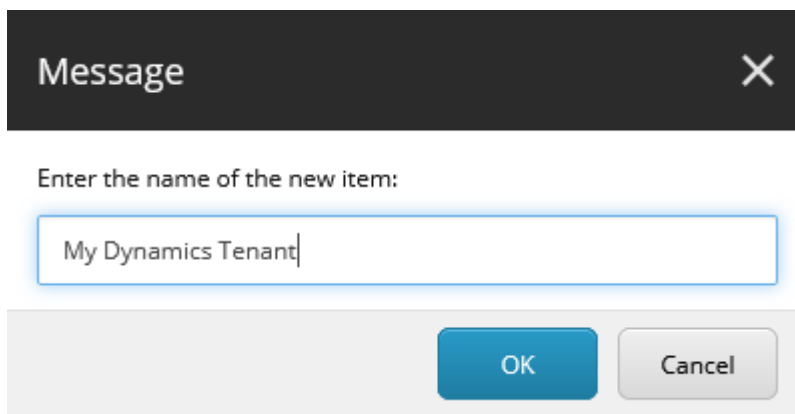
1. In the Content Editor, navigate to `sitecore/system/Data Exchange`.



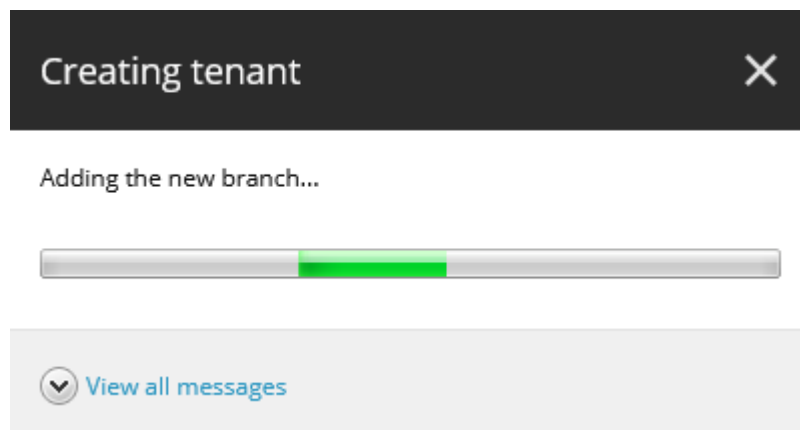
2. On the **Options** tab, click **Connect for Dynamics Tenant** to add a new item.



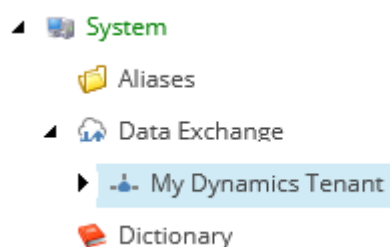
3. Enter a name for the tenant and click **OK**.



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



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



4.3. Configure endpoints

You use an endpoint to identify a data source to read from, or a data target to write to. Connect for Microsoft Dynamics 365 for Sales uses endpoints to represent Sitecore and a Microsoft Dynamics instance.

To set up a connection between Sitecore and Microsoft Dynamics you must configure the following endpoints:

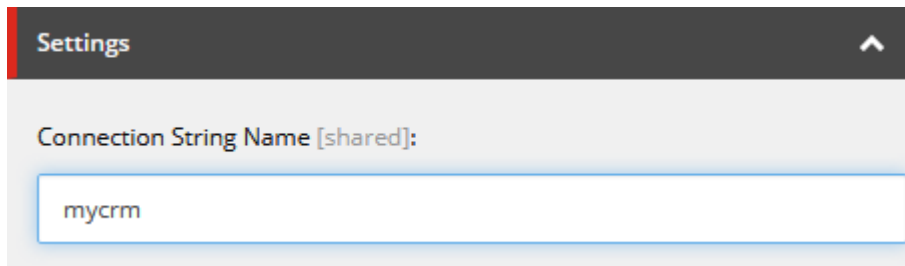
- [Dynamics Organization endpoint](#)
- [xConnect Client endpoint](#)
- [xDB Reference Data Client endpoint](#)
- [Staging Database endpoint](#)

4.3.1. Configure the Dynamics Organization endpoint

To configure a Dynamics Organization endpoint:

1. In the Content Editor, select your tenant, for example, *My Dynamics Tenant*.
2. Navigate to `Endpoints/Providers/Dynamics/Dynamics Organization Endpoint`.

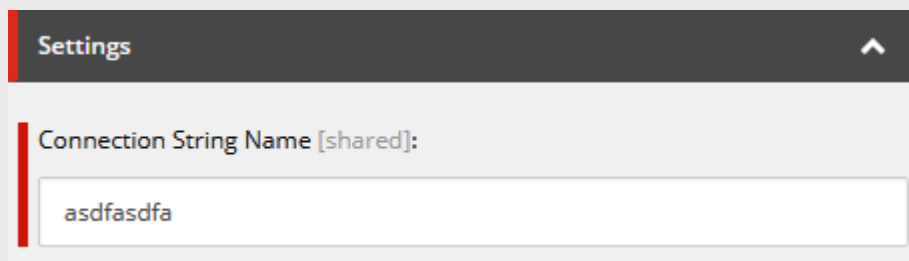
3. In the **Connection String Name** field, enter the name of the connection string you added in [Add a connection string](#).



The screenshot shows a 'Settings' dialog box with a dark header. Below the header, the label 'Connection String Name [shared]:' is followed by a text input field containing the text 'mycrm'.

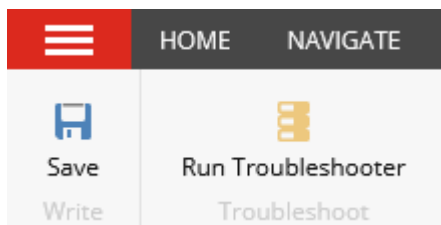
NOTE

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



The screenshot shows the same 'Settings' dialog box, but the text input field now contains the text 'asdfasdfa'.

4. Save the item and then, on the ribbon, click **Run Troubleshooter**.

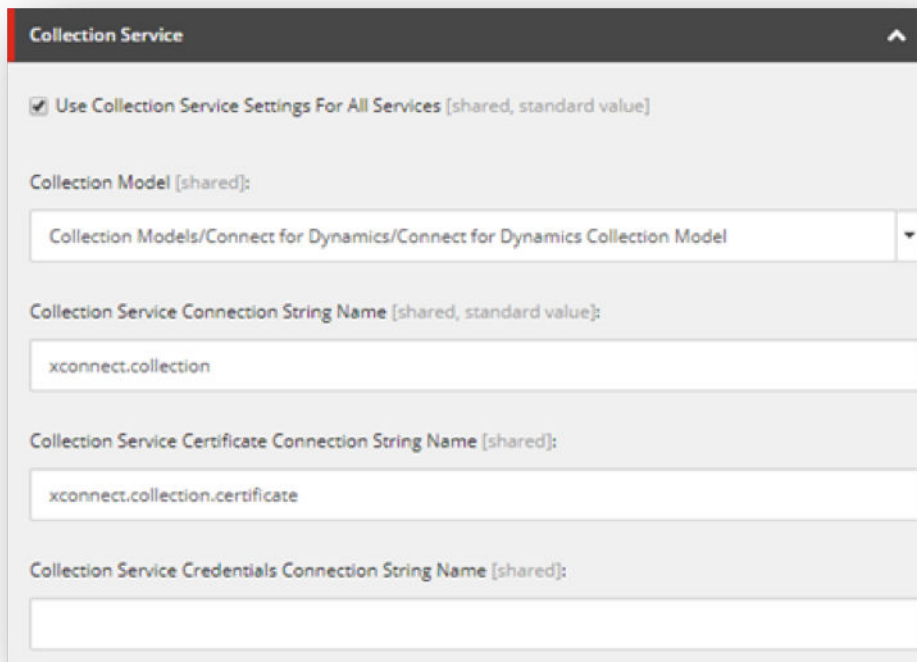


5. A message indicates if a connection could be established to your Dynamics instance. Click **OK** to close the message.

4.3.2. Configure the xConnect Client endpoint

To configure an xConnect Client endpoint:

1. In the Content Editor , select your tenant.
2. Navigate to `Endpoints/Providers/xConnect/xConnect Client Endpoint`.
3. In the **Collection Service** section, enter values for the following fields:
 - Collection Service Connection String Name
 - Collection Service Certificate Connection String Name
 - Collection Service Credentials Connection String Name



You can find all of these values as connection string names in the `ConnectionStrings.config` file on your Sitecore server.

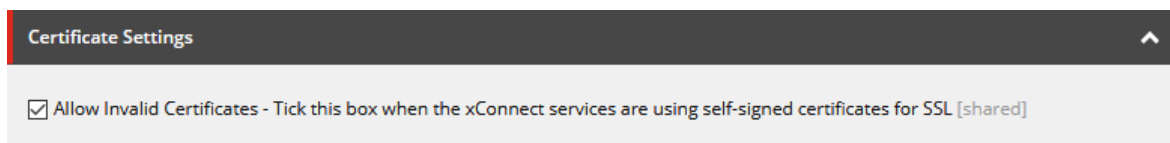
NOTE

For XP0 single deployments you can select **Use Collection Service For All Services**. For XP1 scaled deployments you must use different connection strings for each service.

The following table describes the fields in the **Collection Service** section:

Field name	When required	Description
Collection Service Connection String Name	Always required	<ul style="list-style-type: none">• 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.	<ul style="list-style-type: none">• 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>.
Collection Service Credentials Connection String Name	Required if authentication is enabled on the xConnect server.	<ul style="list-style-type: none">• 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.

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

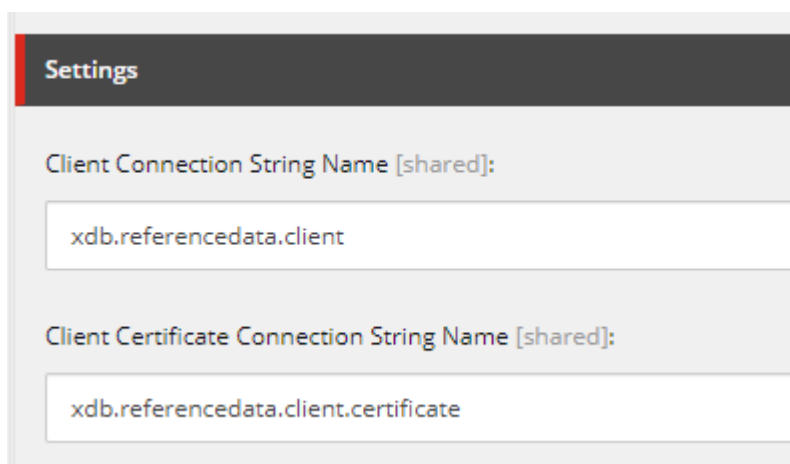


5. On the ribbon, click **Run Troubleshooter**. A message indicates if a connection can be established to your xConnect server. Click **OK** to close the message.

4.3.3. Configure the xDB Reference Data Client endpoint

To configure a xDB Reference Data Client endpoint:

1. In the Content Editor, select your tenant.
2. Navigate to **Endpoints/Providers/xConnect/xDB Reference Data Client Endpoint**.
3. In the **Settings** section, enter values for the following fields:
 - Client Connection String
 - Client Certificate Connection String Name



The following table describes the fields in the **Settings** section:

Field name	When required	Description
Client Connection String Name	Always	Identifies the xDB Reference Data Client settings. By default, the value is blank.
Client Certificate Connection String Name	If SSL is enabled on the xConnect server	Identifies the certificate to use for a secure connection to the xDB Reference Data server. By default, the value is blank.

4. If your xDB Reference Data Client server uses a self-signed certificate for SSL, select the **Allow Invalid Certificates** check box.
5. Save the item.
6. On the ribbon, select **Run Troubleshooter**. A message indicates if a connection to your xDB Reference Data Client server could be established. Click **OK** to close the message.

4.3.4. Configure the Staging Database endpoint

To configure a Staging Database endpoint:

1. In the Content Editor, select your tenant.
2. Navigate to `Endpoints/Providers/SQL/Staging Database`.
3. In the **Settings** section, ensure the **Connection String Name** field matches the connection string for the staging database you added to the Sitecore server.



4. On the ribbon, click **Run Troubleshooter**. A message indicates if a connection can be established to your staging database. Click **OK** to close the message.

4.4. 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.

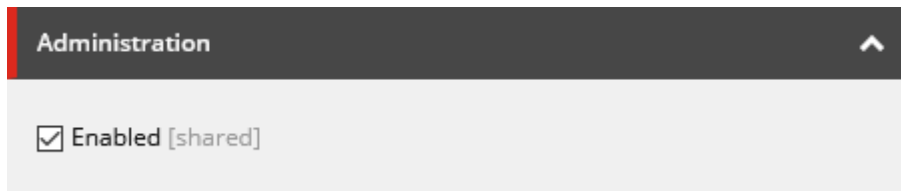
4.5. Enable the tenant

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.



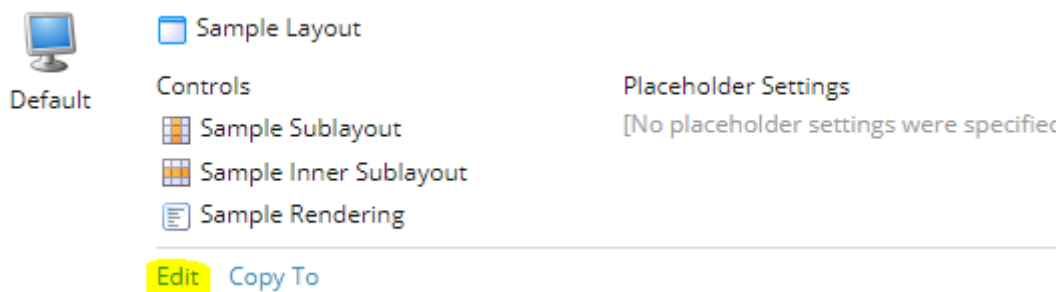
3. Save the item.

4.6. Add Microsoft Dynamics personalization to your site

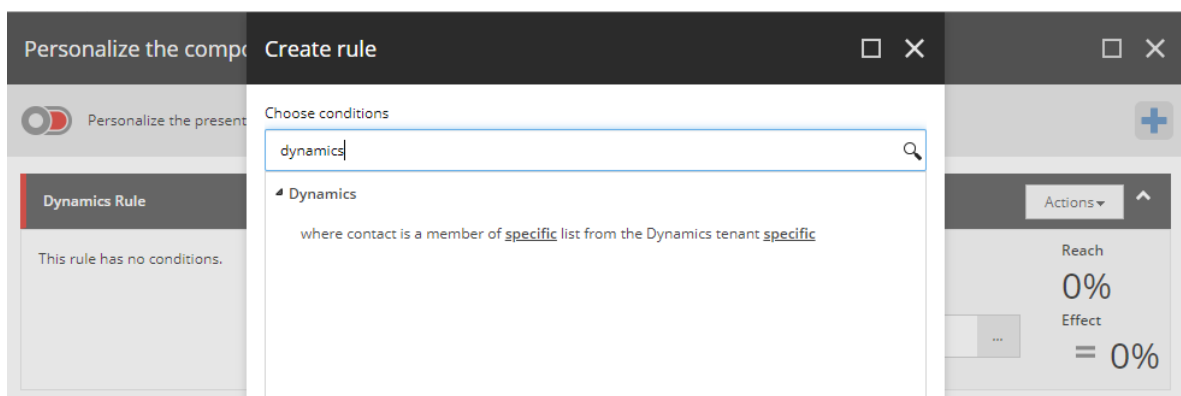
If you have installed Sitecore Connect for Microsoft Dynamics 365 for Sales on a [content delivery server](#), you can add personalization to your site.

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 *dynamics* to narrow the results.



7. In the *Dynamics* 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.