Microsoft Dynamics®

Connector for Microsoft Dynamics Configuration Guide for Microsoft Dynamics® SL

Revised August, 2012

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CONNECTOR FOR MICROSOFT DYNAMICS CONFIGURATION GUIDE FOR MICROSOFT DYNAMICS® SL

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Introduction

Use Connector for Microsoft Dynamics$^®$ to integrate Microsoft Dynamics CRM and Microsoft Dynamics SL data. For example, you can integrate Microsoft Dynamics SL customers with Microsoft Dynamics CRM accounts, and have access to up-to-date customer/account information in both systems.

Connector for Microsoft Dynamics is intended to be used in an implementation where Microsoft Dynamics CRM is used to manage business contacts, track leads, and perform other sales and marketing activities, and where Microsoft Dynamics SL is used to perform accounting functions, manage your company's chart of accounts, and maintain customer, vendor, item, employee, orders and other records.

Within Connector for Microsoft Dynamics, separate adapters are used to identify a source system (where data is read from) and a destination system (where data is written to). The source adapter reads data from the source system. The destination adapter writes the data to the destination system.

Record types that are integrated are referred to as "entities." The enties that are currently available are Customer and Customer Contact.

After installation, you can integrate the following entities in Microsoft Dynamics SL and Microsoft Dynamics CRM. Additional integration functions may be added later.

Microsoft Dynamics SL entity	Integration direction	Microsoft Dynamics CRM entity
Customer	↔	Account
Customer Contact	↔	Contact*

*Note : The Contacts in Microsoft Dynamics CRM must have an Account attached in the parent customer field for the integration to take place.

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Common terminology

The following terms are used in this document.

Term	Definition
Adapter	A software component that enables data exchange through a specific transport. Connector for Microsoft Dynamics uses adapters to read data from and write data to Microsoft Dynamics systems.
Entity	A type of record in a Microsoft Dynamics system. Customers and customer contacts are examples of an entity.
Entity record	A specific occurrence of an entity. A Microsoft Dynamics SL customer record and customer contact are examples of an entity record.
Exception	An abnormal condition or error that occurs during the integration between a source entity and a destination entity.
Integration	The process of synchronizing data that was entered in one Microsoft Dynamics application with another Microsoft Dynamics application. Within Connector for Microsoft Dynamics, an integration consists of a set of maps that can be run to integrate some Microsoft Dynamics CRM entities with some Microsoft Dynamics SL entities.
Integrated record	A record that has been linked between the two systems and then synchronized. For example, if a customer record in Microsoft Dynamics SL has a corresponding account record in Microsoft Dynamics CRM and these records have been linked, it is an integrated record.
Map	A collection of associations between fields in one Microsoft Dynamics CRM entity with fields in another Microsoft Dynamics SL entity. Maps also determine in which direction data flows from a given entity, and defines which adapter is the source and which adapter is the destination.
Microsoft Dynamics Integration (MSDI) database	The database created for Connector for Microsoft Dynamics during the installation process.
Runtime	The process of reading entity information from the source system, transforming that information into data that the destination system can recognize, and then writing the transformed data to the destination system.
Source/Destination entity	The source entity provides the data that will be used to create new entities in the destination system. The destination entity is created or modified after you run an integration. If the Microsoft Dynamics SL customer record is the destination entity and the Microsoft Dynamics CRM account record is the source entity, then Microsoft Dynamics CRM accounts will be created as customers within Microsoft Dynamics SL when the integration is run.

Installation requirements and prerequisites

The following sections contain information and steps to help you with the installation.

System requirements

Before installation of the Connector, be sure that your system meets the following requirements.

- Microsoft® Windows Server® 2008 or Windows Server 2008 R2 Service Pack 2

- Microsoft .NET Framework 4.0

- A valid connection to a computer with Microsoft SQL Server® 2008, SQL Server 2008 R2, or SQL Server 2012 installed

- Microsoft Dynamics CRM web services version 2011 with the most recent Update Rollup applied, or a valid subscription to Microsoft Dynamics CRM online

- For Microsoft Dynamics CRM online only – At least two different Windows Live® IDs and passwords

If you are using Microsoft Dynamics SL 2011:

- Microsoft Dynamics SL 2011 Service Pack 1

- Microsoft Dynamics SL 2011 Service Pack 1 Web Services. The following web services need to be installed and Web Services (WS) needs to be registered.

  - LoginWindows (Microsoft.Dynamics.SL.Webservices.Session.LoginWindows.svc)

  - Lookup (Microsoft.Dynamics.SL.Webservices.Lookups.LookupServices.svc)

  - Customer (Microsoft.Dynamics.SL.Webservices.CustomerService.svc)

System prerequisites

Before installing Connector for Microsoft Dynamics, complete the following prerequisites:

1. If you are using Microsoft Dynamics SL 2011 make sure that the Web Services are installed. Note the Web Services module needs registered before installing the Web Services.

   Note: Make sure to select the LoginWindows, Lookup and Customer web services

For more information on installing web services see the Microsoft Dynamics SL 2011 Web Services guide.

2. Make sure to install Microsoft Dynamics SL 2011 Service Pack 1.

   Note: The service pack has updates for the Web Services so if you had previously installed the service pack and have just installed the Web Services you will need to install the service pack again.

3. Create the ERP integration account – the account that connector uses for the integration between Microsoft Dynamics CRM and Microsoft Dynamics SL. See "Create the ERP integration account" below.

4. Create a Microsoft Dynamics SL Web Services User – the user that is used to update the Microsoft Dynamics SL data using the Microsoft Dynamics SL web service. See "Create a Microsoft Dynamics SL Web Services User".

5. Set up the Web Service Lookup Security. See "Setup the Web Service Lookup Security".

Create the ERP integration account

Connector for Microsoft Dynamics uses several different accounts during installations, including the ERP integration account. This account is used to connect to the Microsoft Dynamics CRM database. You must create this account and identify it as a Trusted Account in Microsoft Dynamics SL.

For more information about user accounts and Connector for Microsoft Dynamics, see the Connector for Microsoft Dynamics installation guide.

1. Create a new domain user account. For detailed instructions, see "Create a new user account" on TechNet (http://technet.microsoft.com/en-us/library/cc732336.aspx).

2. Sign into the *Trusted Web Service Account Maintenance* (95.261.00) screen to add this user as a Trusted Web Service account in Microsoft Dynamics SL.

Create a Microsoft Dynamics SL Web Services User

There needs to be a domain user that is also a user in Microsoft Dynamics SL, and *not* the same as the integration account created above. To be able to distinguish the updates to Microsoft Dynamics SL created by the integration you may want to create a new user that is specifically used only for the integration.

1. Create another new domain user account or use an existing domain user that is different from the user set up in the previous section. For detailed instructions, see "Create a new user account" on TechNet (http://technet.microsoft.com/en-us/library/cc732336.aspx). This step can be skipped if you already have an existing user you want to assign to the Microsoft Dynamics SL Web Service User.

2. In Microsoft Dynamics SL 2011 SP1 create a Microsoft Dynamics SL user with the domain user created in step 1 if it does not already exist.

3. Give this user rights to the web services required to run the Microsoft Dynamics CRM integration.

    a. Go to *Access Rights Maintenance* (95.270.00).

    b. Select the **User** you created in step 2.

    c. Click on the web service tab.

        i. Select the individual Web Service methods by pressing F3 to display the list of methods, then choosing the methods related to the Customer web service.

            OR

        ii. Select the AR module and click the preload button for all web services related to Customer web service to be loaded automatically.

    d. Click the **Access** checkbox for the Customer web service methods (those that include Microsoft.Dynamics.SL.Customer Service in the web service method name)

Setup the Web Service Lookup Security

Security needs to be setup for the web services methods. In the Web Services Lookup Security (98.380.00) associate Lookup methods with non-Lookup methods for access rights.

1. Open *Web Services Lookup Security* (98.380.00)

2. In the **Web Service Method** box select the methods identified below and use the **Relate** ⟩ button to transfer from the **Unrelated Lookups** to the **Related Lookups**:

Method	Lookups to Relate
Microsoft.Dynamics.SL.CustomerService.CreateCustomer	• Account Category List
	• Company List
Microsoft.Dynamics.SL.CustomerService.ReadCustomer	• Account Category List
	• Account/Subaccount List
	• Allocation Method List
	• Contract List
	• Contact List by Date

Updating Microsoft Dynamics SL

When performing maintenance on Microsoft Dynamics SL, we recommend that you deactivate all maps and stop the Connector for Microsoft Dynamics service. After your maintenance is completed, start the Connector for Microsoft Dynamics service again and activate your maps. This ensures that the Connector for Microsoft Dynamics is not querying into your ERP system during maintenance.

This includes installation of hot fixes and running Database Maintenance.

Installation and configuration

The following steps explain the basic installation of Connector for Microsoft Dynamics. Settings can be further configured or customized during or after the installation process.

Note: These procedures must be completed in order, or Connector for Microsoft Dynamics will not operate correctly and data will not be synchronized between Microsoft Dynamics CRM and Microsoft Dynamics SL.

1. Install Connector for Microsoft Dynamics

2. Configure adapter settings.

3. Create an integration.

4. Required Customizations

5. Run initial data synchronization.

Review the System requirements before you begin the installation process. Only one instance can be installed on a system at any time.

Install Connector for Microsoft Dynamics

The Connector for Microsoft Dynamics must be installed before you can configure it for your Microsoft Dynamics ERP system. For instructions, see the Connector for Microsoft Dynamics installation guide.

Note: The Connector for Microsoft Dynamics does not need to be installed on the same computer or server as either Microsoft Dynamics CRM or Microsoft Dynamics SL, though it does need a network connection that will allow it to communicate with the web services exposed by these systems.

Configure adapter settings

Before you can run an integration, you must provide settings for the adapters that the integration process will use. The first time you start the client application, the **Adapter Settings** window is displayed so that you can enter settings for the adapters that were installed.

1. Open Connector for Microsoft Dynamics. (**Start** > **All Programs** > **Microsoft Dynamics** > **Microsoft Dynamics Adapter** > **Connector for Microsoft Dynamics**)

2. If the **Adapter Settings** window did not open automatically, click **Adapter Settings**.

3. In the left pane of the **Adapter Settings** window, select **Microsoft Dynamics CRM 2011**.

4. Configure the Microsoft Dynamics CRM adapter as explained in the Connector for Microsoft Dynamics installation guide.

    Note: When you integrate with Microsoft Dynamics CRM 2011, certain customizations will be imported to help ensure compatibility and functionality with the Connector for Microsoft Dynamics.

5. In the left pane of the **Adapter Settings** window, select the **Microsoft Dynamics SL 2011** adapter.

6. Enter the name of the domain that the Microsoft Dynamics SL server belongs to.

7. Enter the user name and password for the Microsoft Dynamics SL web services account. For more information about this account, see "Create a Microsoft Dynamics SL Web Services User".

8. Enter the URL for all three of the Microsoft Dynamics SL web services (customer, login, and lookups.lookup.

    Note: At the time the Adapter Setting screen appears the URL defaults "/Host Name/" in the URL. That needs to be replaced with your actual URL name for the Microsoft Dynamics SL web services.

Example: /Host Name/Microsoft.Dynamics.SL.WebServices.CustomerService.svc would now look similar to this:

https://ServerName/Microsoft.Dynamics.SL.WebServices.CustomerService.svc.

Make the same edits for Microsoft.Dynamics.SL. WebServices.Session.LoginWindows.svc and Microsoft.Dynamics.SL. WebServices.Lookups.LookupService.svc.

9. Click **Test Settings** to connect to the Microsoft Dynamics SL web service using the information that you entered.

10. Click **Apply**.

Create an integration

An integration is a collection of active or inactive maps for one source/destination system combination. You must create an integration and activate maps before you can synchronize data between two Microsoft Dynamics applications. For more information about activating maps, see "Configure map settings".

1. Open Connector for Microsoft Dynamics.
    (**Start** > **All Programs** > **Microsoft Dynamics** > **Microsoft Dynamics Adapter** > **Connector for Microsoft Dynamics**)

2. Click **New Integration**.

3. Select one of the following options.

    - **Blank** – Create a blank integration where you must create maps manually. Skip to step 5.

    - **From Template** – Create a new integration from an integration template.

4. Select **Dynamics SL 2011/Dynamics CRM 2011**template which will fill in the Application 1 (contains Microsoft Dynamics SL 2011) and Application 2 (contains Microsoft Dynamics CRM 2011) fields.

5. Select the Microsoft Dynamics SL company to integrate. If the company name list is empty, verify that you entered your Microsoft Dynamics SL adapter settings correctly and click **Refresh** to attempt to retrieve the list of companies again. For more information, see to Configure adapter settings.

6. Select the Microsoft Dynamics CRM company to integrate. If the company list is empty, verify that you entered your Connector for Microsoft Dynamics settings correctly and you have completed the Microsoft Dynamics CRM Configuration utility for each organization that you want to integrate. Click **Refresh** to attempt to retrieve the list of companies again. For more information, see to Configure adapter settings.

7. Click **Create**. This will import the maps that will be available for use with the integration.

    Note: The default Check for data modified after date is set to 1/1/1900 12:00 AM UTC (displayed as the local time zone) for all maps.

    For more information, see Change the data modification date in the Installation Guide.

Required Customizations

To elimate the possibility of getting errors from data that is not the same between Microsoft Dynamics CRM and Microsoft Dynamics SL.

Customize Terms

Terms may be different in Microsoft Dynamics CRM and Microsoft Dynamics SL. The terms that will be used are those that are in Microsoft Dynamics SL. Every time you add or change terms in Microsoft Dynamics SL you must make the same change in Microsoft Dynamics CRM. To customize the Microsoft Dynamics CRM terms list to be consistent with Microsoft Dynamics SL, follow these steps:

1. In Microsoft Dynamics CRM navigate to **Workplace |Account |Customers |Accounts**

2. Click on the **New** button to load the *Account:New* page.

3. Click on the **Customize** tab at the top of the page.

4. Click **Form**.

5. Scroll down until the **Payment Terms** box is in view.

6. Click on the **Payment Terms** box.

7. Click **Change Properties**.

8. In the *Field Properties* dialog window, click the **Details** tab, and then click **Edit**.

9. In the **Option** section, click the **Add** button.

10. Change the value in the **Label** box to one of the valid Microsoft Dynamics SL payment terms.

11. Complete steps 9 and 10 for each Microsoft Dynamics SL payment terms that have been set up for use by customers in Shared Information *Terms Maintenance* (21.270.00).

12. Click **Save and Close** on the *Field:Payment Terms of Account* page.

13. Click **OK** on the *Field Properties* dialog window.

14. Click **Save** at the top of the *Form:Account* page.

15. Once saved click **Publish** at the top of the *Form:Account* page

Customize Account Number

The **Customer ID** to **Account Number** fields that are integrated are set to be 15 characters long. However, if a user does not have the Flexkey Definition set to 15 characters, then they will not integrate if the field exceeds the Flexkey Definition that is set up in your database.

You must customize your **CRM Account** screen to only accept the Customer ID flexkey definition length for the **Account Number** field. To determine this length open the Microsoft Dynamics SL *FlexKey Definition* (21.320.00) screen in Shared Information. Select the CUSTOMERID **Field Type**. Find the **Total Length**. This is the maximum value to which you can set the Customer ID field.

To prevent an error, you must customize the *Account Screen* in CRM by putting a size restriction on the field. Follow these steps:

1. Open the *Microsoft Dynamics CRM Account* screen.

2. On the **Customize** tab, click **Form** to customize the form.

4. Click the **Account Number** field to put the focus on that field, and then click **Change Properties**.

5. Once **Field Properties** appears, click **Edit** on the **Details** tab.

6. Change the **Maximum Length** to equal to the Microsoft Dynamics Flexkey Definition Total Length for CUSTOMERID.

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7. Click **Save and Close**.

8. Click **Ok** to close the *Field Properties* screen.

9. Click **Save** in the *Account Customize* Screen.

10. Then, click **Publish**.

11. Close the screen.

Optional Customizations

State - In Microsoft Dynamics SL the **State/Province ID** box in the address can be up to 3 characters. In Microsoft Dynamics CRM the State field is a text field of 50 characters. To avoid issues when submitting from Microsoft Dynamics CRM to Microsoft Dynamics SL the data entered in Microsoft Dynamics CRM must be exactly the same as the states are set up in Microsoft Dynamics SL. You may want to customize the Microsoft Dynamics CRM state field in the *Contact* and *Account* screens to correspond to the options available in *State/Province Maintenance* (21.290.00) in Microsoft Dynamics SL.

Address Name – The **Address Name** field must be set to "PRIMARY" in CRM. It will be set to "PRIMARY" if it is blank or will be changed to "PRIMARY" when the Microsoft Dynamics SL Main Address is integrated. It is recommended that the **Address Name** field be disabled so that it is set to "PRIMARY" from the start of the integration.

Run initial data synchronization

After Connector for Microsoft Dynamics is installed and the adapters are configured, data needs to be synchronized between Microsoft Dynamics CRM and Microsoft Dynamics SL before you can run integrations on a regular schedule. The next section, Initial data synchronization, will guide you through this process.

Initial data synchronization

Connector for Microsoft Dynamics is designed to integrate data between Microsoft Dynamics SL and Microsoft Dynamics CRM in the following scenarios:

- New Microsoft Dynamics SL and Microsoft Dynamics CRM application installations

- Existing Microsoft Dynamics SL installation and new Microsoft Dynamics CRM installation or existing Microsoft Dynamics CRM installation and new Microsoft Dynamics SL installation

- Existing Microsoft Dynamics SL and Microsoft Dynamics CRM installations

Data could exist in one or both applications. You must synchronize this data prior to running the integration on a regular schedule. If you are using the Connector for Microsoft Dynamics with existing installations of the applications, this affects some of the maps that you will use during the initial data synchronization process.

Example: Customer Contacts cannot be synchronized prior to Customers being synchronized.

In the scenerio where both the Microsoft Dynamics SL and Microsoft Dynamics CRM are new installations there is no need to synchronize data since there are only new customers/accounts and their contacts being entered.

In the scenerio that there is data in both Microsoft Dynamics CRM and Microsoft Dynamics SL, Microsoft Dynamics SL will be considered the master data.

Initial synchronization should be from Microsoft Dynamics SL to Microsoft Dynamics CRM. Any Account or Contact that is in Microsoft Dynamics CRM can only be moved to Microsoft Dynamics SL by submitting it using the submit button.

Note: If you have existing installations of the applications, you should set up duplicate detection in Microsoft Dynamics CRM before synchronizing the data. For more information, see "Setting up duplicate detection" in the Connector for Microsoft Dynamics installation guide. Duplicate detection may not find all of your duplicates if the field set up for duplicate detection is not exactly the same.

Prepare the system

There are specific steps that you should complete after installation to ensure a smooth implementation. This section explains the two system preparation steps.
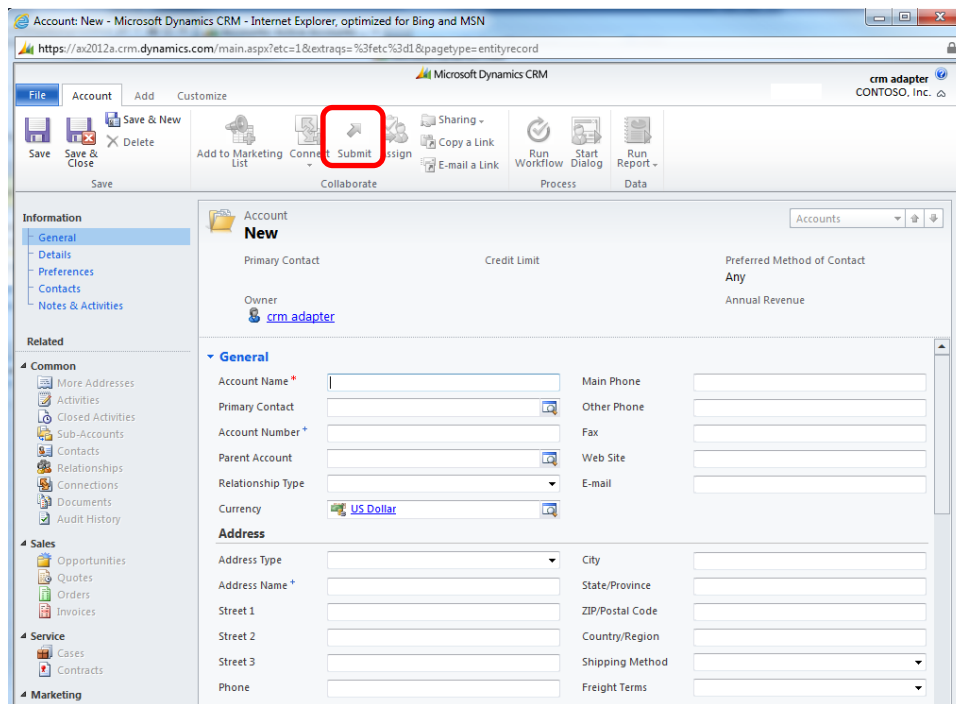
Verify customizations for Microsoft Dynamics CRM

Verify that the customizations have been deployed by selecting settings in Microsoft Dynamics CRM, then select solutions under the customization section. Verify that the ConnectorForMicrosoftDynamicsSl is listed. Operation will be impaired if these special Microsoft Dynamics CRM customizations are not deployed in your Microsoft Dynamics CRM installation.

Verify that Connector for Microsoft Dynamics customizations for Microsoft Dynamics CRM have been properly installed.

1. Open Microsoft Dynamics CRM for the organization previously selected.

2. From the **Sales** node, select **Accounts**. Click **New**.

3. You should see a **Submit** option in the top command bar. If you do not see this option, then the Connector for Microsoft Dynamics customizations are not properly installed.

   Note: The **Submit** button is not active until after the record has been saved and it will become inactive once the account has been integrated.

Verify map modifications

Verify that the integration maps are set up for your specific needs. The map templates are set up to work without customizations and will integrate all data that is common in both applications (Microsoft Dynamics CRM and Microsoft Dynamics SL). If there is any data mapped that you do not want to integrate—or data that is not mapped that you do want to integrate—you should make these changes now. See the "Edit map setting" in the Installation Guide for more information.

Synchronize the data

The initial data synchronization process follows several steps to set up integrated data between Microsoft Dynamics SL and Microsoft Dynamics CRM. The recommended map run order is listed below, and the synchronization procedures provide additional details about each map.

Initial data synchronization procedures

The optimal way to initially synchronize your data is to customize the fields necessary in Microsoft Dynamics CRM (see Required Customizations) (and then run the integration maps individually, starting with the **Customer to Account** map. To alleviate flooding the log files and avoid multiple dependency scenarios, maps should be run in the following order:

1. Map customer accounts (Microsoft Dynamics SL to Microsoft Dynamics CRM)

2. Map customer contact information. (Microsoft Dynamics SL to Microsoft Dynamics CRM)

If the maps are run in a different order than suggested, or if they are run simultaneously, the log file may end up with an excess of exceptions due to multiple retries because of certain data dependencies. Running the maps in the suggested order will integrate the data in an order that will provide the least amount of exceptions due to dependent data. The suggested map run order also keeps the log file as clean as possible, makes it easier to troubleshoot errors, and helps some errors resolve themselves.

Note: During the initial data synchronization process, exceptions may appear. Initial data synchronization exceptions are common due to data that has not been integrated yet. The system is set up to automatically retry exceptions due to missing data.

If duplicate detection is turned on and have a published rule, during the data synchronization, if the SL customer is the same as an account that exists in Microsoft CRM it will be *updated* instead of creating a new account.

Example 1: If you use the same account number in Microsoft Dynamics CRM as is the Microsoft Dynamics SL Customer ID the detection should be based on the Account Number.

Example 2 – If the Account name is the same as the Microsoft Dynamics SL Customer name you should have duplicate detection based on the Account name/Customer name. Otherwise, a new account will be created when the data synchronization takes place.

Map customers and accounts

Microsoft Dynamics CRM supports both customer account information and customer contact information, but Microsoft Dynamics SL manages only customer information and handles contact information differently. The Microsoft Dynamics CRM accounts will be the only integration to Microsoft Dynamics SL customers. Due to this, you will only have access to the **Account to Customer** and **Customer to Account** set of maps. Mapping of the Microsoft Dynamics CRM contacts will be to the Customer contact in Microsoft Dynamics SL.

Note: If you decide to enter your initial customer data in Microsoft Dynamics CRM, you must click on the **Submit** button for each Microsoft Dynamics CRM account that you integrate to Microsoft Dynamics SL. This allows you to keep Microsoft Dynamics CRM account records in Microsoft Dynamics CRM and not in Microsoft Dynamics SL.

Mapping customers to accounts

1. **Note:** If you have existing installations of both Microsoft Dynamics SL and Microsoft Dynamics CRM, the Microsoft Dynamics SL customer records take priority and should be integrated before the Microsoft Dynamics CRM records. Make sure that duplicate detection is turned on in Microsoft Dynamics CRM so that duplicate customers are not created in Microsoft Dynamics CRM. Verify that that you have entered all your customers in either Microsoft Dynamics SL or Microsoft Dynamics CRM (accounts).

    If there are accounts in Microsoft Dynamics CRM that you want to move to Microsoft Dynamics SL, open the Microsoft Dynamics CRM account form for each account to integrate and click **Submit** at the top of the form. Only accounts that have been submitted will be integrated to Microsoft Dynamics SL.

2. Open Connector for Microsoft Dynamics.

3. Navigate to the integration to work with and click the **Maps** node in the left pane.

4. Select the correct map depending on where you entered your initial customer data:

    - If you entered your initial customer data in Microsoft Dynamics SL, select **Customer to Account**.

    - If you entered your initial customer data in Microsoft Dynamics CRM, select **Account to Customer**.

    If you do not want to change any of the default settings for the maps, continue to step 5. To change the map settings, see "Edit map settings" in the Connector for Microsoft Dynamics installation guide.

5. In the **Status** area, click **Activate**.

6. Click the **Edit** link next to the **Check for changes** area to open the **Map Run Schedule** window and change it if necessary (it is set to run every 45 seconds). Make sure that the **Start Date** is before the date that you first entered data into Microsoft Dynamics SL or Microsoft Dynamics CRM. Click **OK** to close the **Map Run Schedule** window.

    If your business needs require a longer run time, you can set the map run schedule to any duration.

7. Verify that the date listed in the **Check for data modified after** area is before the date you entered your Microsoft Dynamics SL customers or Microsoft Dynamics CRM accounts. To change this date, stop the Connector for Microsoft Dynamics service. Click the **Edit** link next to the **Check for data modified after** area to open the **Check for data modified after** window. Enter the new value and click **OK**. Start the Connector for Microsoft Dynamics service again.

8. Click **Save** on the top command bar.

    In the **Status** section of the **Map** page, the **Last run** status is displayed. While the integration is running, the **Last run** status is displayed as **Currently running** and displays the numbers of

changes found, changes written, deletions found, records deleted, and failures. Wait until the **Currently running** status is no longer displayed and the **Last run** status is displayed to allow the integration to run and move the Microsoft Dynamics SL customers to Microsoft Dynamics CRM accounts.

Note: The amount of time required to integrate your Microsoft Dynamics SL customers with your Microsoft Dynamics CRM accounts depends on the number of customers in your Microsoft Dynamics SL and/or Microsoft Dynamic CRM data set.

9. Verify that all the customers and accounts have been fully integrated.

10. Click the **View log for this map** link at the top of the **Status** section. Review any events that are displayed and fix any issues before proceeding. For more information, see "Reviewing the log file" in the Connector for Microsoft Dynamics installation guide.

11. To change the map run schedule for ongoing integration, repeat step 6 and change the map run schedule to the appropriate settings for this map.

Map customer contacts and contacts

Microsoft Dynamics CRM contact information will be integrated only to customer contact information in Microsoft Dynamics SL. To do this you will only have access to the **Contact to Customer Contact** and **Customer Contact to Contact** set of maps.

Mapping customer contacts to contacts

Note: If you have existing installations of both Microsoft Dynamics SL and Microsoft Dynamics CRM, the Microsoft Dynamics SL customer contact records take priority and should be integrated before the Microsoft Dynamics CRM records. Make sure that duplicate detection is turned on in Microsoft Dynamics CRM so that duplicate customer contacts are not created in Microsoft Dynamics CRM.

1. Verify that that you have entered all your customer contacts in either Microsoft Dynamics SL or Microsoft Dynamics CRM (contacts).

    If there are contacts in Microsoft Dynamics CRM that you want to move to Microsoft Dynamics SL, you must first make sure that the **Parent Customer** is entered. Only those contacts that have a **Parent Customer** will be integrated. Open the Microsoft Dynamics CRM contact form for each contact to integrate and click **Submit** at the top of the form. Only contacts that have been submitted will be integrated to Microsoft Dynamics SL.

2. Open Connector for Microsoft Dynamics.

3. Navigate to the integration to work with and click the **Maps** node in the left pane.

4. Select the correct map depending on where you entered your initial contact data:

    - If you entered your initial customer contact data in Microsoft Dynamics SL, select **Customer Contact to Contact**.

    - If you entered your initial customer contact data in Microsoft Dynamics CRM, select **Contact to Customer Contact**.

    If you do not want to change any of the default settings for the maps, continue to step 5. To change the map settings, see "Edit map settings" in the Connector for Microsoft Dynamics installation guide.

5. In the **Status** area, click **Activate**.

6. Click the **Edit** link next to the **Check for changes** area to open the **Map Run Schedule** window and change it if necessary (it is set to run every 45 seconds). Make sure that the **Start Date** is before the date that you first entered data into Microsoft Dynamics SL or Microsoft Dynamics CRM. Click **OK** to close the **Map Run Schedule** window.

If your business needs require a longer run time, you can set the map run schedule to any duration.

7. Verify that the date listed in the **Check for data modified after** area is before the date you entered your Microsoft Dynamics SL customer contacts or Microsoft Dynamics CRM contacts. To change this date, stop the Connector for Microsoft Dynamics service. Click the **Edit** link next to the **Check for data modified after** area to open the **Check for data modified after** window. Enter the new value and click **OK**. Start the Connector for Microsoft Dynamics service again.

8. Click **Save** on the top command bar.

   In the **Status** section of the **Map** page, the **Last run** status is displayed. While the integration is running, the **Last run** status is displayed as **Currently running** and displays the numbers of changes found, changes written, deletions found, records deleted, and failures. Wait until the **Currently running** status is no longer displayed and the **Last run** status is displayed to allow the integration to run and move the Microsoft Dynamics SL contacts to Microsoft Dynamics CRM contacts.

   Note: The amount of time required to integrate your Microsoft Dynamics SL customer contacts with your Microsoft Dynamics CRM contacts depends on the number of customer contacts in your Microsoft Dynamics SL and/or Microsoft Dynamic CRM data set.

9. Verify that all the customer contacts and contacts have been fully integrated.

10. Click the **View log for this map** link at the top of the **Status** section. Review any events that are displayed and fix any issues before proceeding. For more information, see "Reviewing the log file" in the Connector for Microsoft Dynamics installation guide.

11. To change the map run schedule for ongoing integration, repeat step 6 and change the map run schedule to the appropriate settings for this map.

Connector configuration

The following sections contain information about how to configure Connector for Microsoft Dynamics. For more information, see the Connector for Microsoft Dynamics installation guide.

Deleting entities

When you delete a Customer or Customer Contact in Microsoft Dynamics SL the Customer or Customer Contact will be deleted, however the CRM account or contact will not be deleted. However, if an Account or Contact in CRM is deleted then deletion will take place in Microsoft Dynamics SL for the Customer and/or Customer Contact. The only exception is when the Customer has open balances. The Customer cannot be deleted until the balances are zero.

Configure map settings

If you created an integration from a template, maps have already been imported for you. For more information, see "Configuring map settings" in the Connector for Microsoft Dynamics installation guide.

If you have *not* created an integration from a template, you must add maps. A map is a collection of associations between one entity's fields in one Microsoft Dynamics system with another entity's fields in another Microsoft Dynamics system. For example, to integrate the Microsoft Dynamics CRM account entity with the Microsoft Dynamics SL customer entity, you must add and activate the **Account to Customer** map and the **Customer to Account** map.

Maintenance

The Connector for Microsoft Dynamics has several options for maintaining your integrations. For more information, see the Connector for Microsoft Dynamics installation guide.

Appendix

The following sections are provided for your reference.

- [Map dependencies](#)
- [Microsoft Dynamics CRM to Microsoft Dynamics SL maps](#)
- [Microsoft Dynamics SL to Microsoft Dynamics CRM maps](#)

Map dependencies

Some maps in Connector for Microsoft Dynamics are dependent on values in other maps. Maps with a high number of dependencies will not successfully run until dependent values in other maps are integrated first. Map dependencies are listed below.

Microsoft Dynamics SL to Microsoft Dynamics CRM

The following dependencies exist when mapping entities from Microsoft Dynamics SL to Microsoft Dynamics CRM.

Map	Dependency
Customer to Account	• no dependency
Customer Contact to Contact	• For a customer contact there is a customer dependency, Customer to Account will need to be integrated first • Only Customer Contacts with the type of "Other" will be integrated to Microsoft Dynamics CRM Contacts. All other types will be ignored.

Microsoft Dynamics CRM to Microsoft Dynamics SL

The following dependencies exist when mapping entities from Microsoft Dynamics CRM to Microsoft Dynamics SL.

Account to Customer - Existing Microsoft Dynamics CRM accounts will not be integrated to Microsoft Dynamics SL unless they are submitted.

Contact to Customer Contact - Existing Microsoft Dynamics CRM contacts will not be integrated to Microsoft Dynamics SL unless they are submitted.

Microsoft Dynamics CRM to Microsoft Dynamics SL maps

The following sections provide additional information about how data is mapped from Microsoft Dynamics CRM to Microsoft Dynamics SL. Detailed information about each map is listed.

Account to Customer

In the **Account to Customer** map, the Microsoft Dynamics CRM account entity is the source entity and the Microsoft Dynamics SL customer entity is the destination entity. This map provides the field associations that are necessary to read data from an account record and write that data to the correct fields in the customer record.

- This map should not be scheduled to run at the same time that the **Customer to Account** map runs during initial data synchronization. For more information about the order in which maps should be run, see Initial data synchronization procedures.

- New accounts will not be integrated until you click **Submit** on the **Account** form in Microsoft Dynamics CRM.

- The requirement level of the **Account Number** field on the **Account** form is noted as **Business Recommended.** When integrating Microsoft Dynamics CRM accounts to Microsoft Dynamics SL customer accounts, you should enter an account number in order to avoid inconsistent generation of the ERP key used for integration.

- Updates to the Dynamics CRM account address fields of **Address 1** will update the Microsoft Dynamics SL customer's **Main Address**.

- Updates to Microsoft Dynamics CRM account *More Addresses* fields will integrate with Microsoft Dynamics SL Shipping Addresses.

Contact to Customer Contact

In the **Contact to Customer Contact** map, the Microsoft Dynamics CRM contact entity is the source entity and the Microsoft Dynamics SL customer entity is the destination entity. This map provides the field associations that are necessary to read data from a contact record and write that data to the correct fields in the customer contact record.

- This map should not be scheduled to run at the same time that the **Customer to Account** map runs during initial data synchronization. For more information about the order in which maps should be run, see Initial data synchronization procedures. After the initial synchronization is completed these maps can run at the same time.

- New Microsoft Dynamics CRM contacts will not be integrated until you click **Submit** on the **Contact** form.

- If a contact in Microsoft Dynamics CRM has a parent assigned to it and then it is integrated into Microsoft Dynamics SL using the **Contact to Customer Contact** map, it will be created as one of the contacts for the account it has as its parent. In Microsoft Dynamics SL it will show up as one of the customer contacts

    - If you create a Microsoft Dynamics CRM contact , then **Submit**, the ERP key is created by combining the Parent Customer ERP key plus the first five characters of the **Last Name** field value, plus a random 3 digit number.

Microsoft Dynamics SL to Microsoft Dynamics CRM maps

The following sections provide additional information about how data is mapped from Microsoft Dynamics SL to Microsoft Dynamics CRM. Detailed information about each map is listed.

Customer to Account

In the **Customer to Account** map, the Microsoft Dynamics SL customer entity is the source entity and the Microsoft Dynamics CRM account entity is the destination entity. This map provides the field associations that are necessary to read data from a customer record and write that data to the correct fields in the account record.

- This map should not run at the same time that the **Account to Customer** map runs during initial synchronization. For more information about the order in which maps should be run, see Initial data synchronization procedures. After initial synchronization these maps can run at the same time.

Shipping Address in Microsoft Dynamics SL

In Microsoft Dynamics CRM, when an address is added to the **Account** form using the **Address 1 Name** or **Address 2 Name** entities, the same address name cannot also be added to the **More Addresses** form for that account.

Customer Contact to Contact

In the **Customer Contact to Contact** map, the Microsoft Dynamics SL customer contact entity is the source entity and the Microsoft Dynamics CRM contact entity is the destination entity. This map provides the field associations that are necessary to read data from a customer contact record and write that data to the correct fields in the contact record.

- This map should not be scheduled to run at the same time that the **Account to Customer** map runs during initial data synchronization. For more information about the order in which maps should be run, see Initial data synchronization procedures.

- Only Customer Contacts with the type of "Other" will be integrated to Microsoft Dynamics CRM Contacts. All other types will be ingnored.

- For customer contact records have parent customer dependencies, the **Customer Contact to Contact** map is dependent on whether the parent customer record has been integrated.

- If you create a Microsoft Dynamics SL customer contact and save. The ERP key is created by combining the Cutomer ID plus the Contact ID.