

Oracle CPQ Connector for Microsoft Dynamics 365 Installation and Setup Guide

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REVISION HISTORY

This document will continue to evolve as existing sections change and new information is added. All updates appear in the following table:

DATE	WHAT'S CHANGED	NOTES
SEP 2020		Updated contents of entire document and added support for Microsoft Dynamics Unified UI
AUG 2018		Added Oracle CPQ Cloud to the image on the cover page
MAY 2018		Added the following sections: Insert Access Token in Header of URL Data Function User Integration for Microsoft Azure Directory
FEB 2018		Initial Document Creation

INTRODUCTION

This document introduces the new Oracle CPQ Connector for Microsoft Dynamics 365. This solution allows users to create quotes in CPQ from within Dynamics, securely synchronizes data between the systems, and includes support for single-sign on via Azure Active Directory.

This document is written for the administrator of your environment who has the access and permissions to customize your system. It guides the administrator through the installation of the Oracle CPQ Connector for Microsoft Dynamics 365, importing the Dynamics Migration Package and the process to setup the integration. It does not comprehensively describe every single feature that is part of the Dynamics-CPQ integration, please refer to the Oracle CPQ Administration Online Help for additional details.

Before you begin, be sure to read the [Prerequisites](#) section.

Note: Most of the setup steps will be documented using the legacy customization interface, Microsoft is rolling out a newer experience for system customization. Administrators should use the interface they are most comfortable with, however some of the steps may be different than documented depending on the chosen interface.

GIVE US FEEDBACK

We welcome your comments and suggestions to improve the content. Please send us your feedback at cpqcloud_documentation_us_grp@oracle.com.

Prerequisites

To successfully install and use the Oracle CPQ Connector for Microsoft Dynamics 365, there are a few prerequisites to be aware of which are listed in the table below.

PREREQUISITE	DESCRIPTION/ADDITIONAL INFORMATION
Microsoft Dynamics 365 Version	A Microsoft Dynamics 365 environment; Version 9.0 or later.
Dynamics 365 Sales Solution	Dynamics 365 Sales, Enterprise Edition App installed. Refer to Set up Dynamics 365 Sales
Oracle CPQ Version	Update 18A or later . Oracle CPQ Update 18A is the minimum supported version. Occasionally, newly released features are not compatible with earlier versions of Oracle CPQ. Please reference the What's New documents for specific version compatibility details.
Enable CRM OAuth in Oracle CPQ	You must verify Enable CRM OAuth setting is set to Yes in the Oracle CPQ Admin > General Site Options page.
Use Price Books Enabled	Oracle CPQ must be configured to use price books. This setting must be enabled by Oracle Cloud Operations. If price books are not enabled for your site, you must log a Service Request. Refer to My Oracle Support .
Price Book Attribute Set Available	Verify that you have the Price Book Attribute Set on your CPQ Main Document. If one does not exist, you must create it before beginning this process.
My Oracle Support Account	You need an active My Oracle Support account to complete these steps and receive assistance. Refer to My Oracle Support .

Note: This document assumes that the site has been provisioned with the latest Oracle CPQ Base Reference Application. If you have an older version of the Reference Application (Ref App) on the site, the integration is still expected to work but additional undocumented setup steps may be required.

Check the Oracle CPQ and Reference Application Versions

Before you begin you may want to check both the CPQ Version and the Reference Application version that was applied to your CPQ site. This section provides the steps to retrieve the application version, the Ref App version and the Catalog of Ref App elements file. This provides a more detailed view of the initial state of your site.

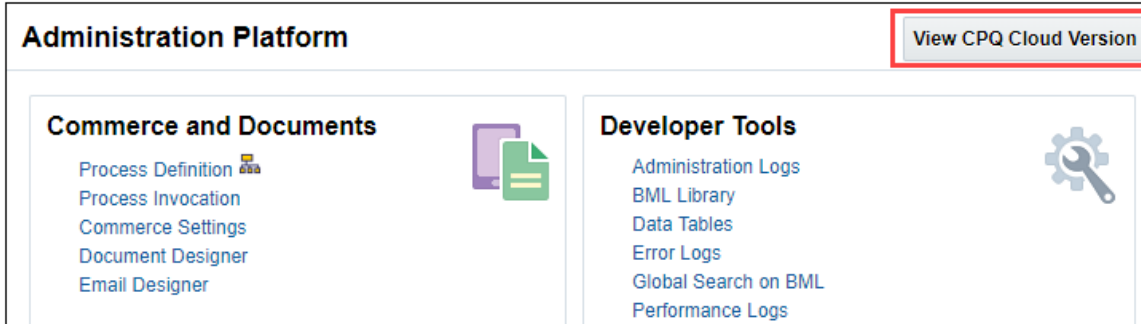
This section provides procedures for the following:

- Locate the Oracle CPQ Version Information
- Locate the Reference Application Information

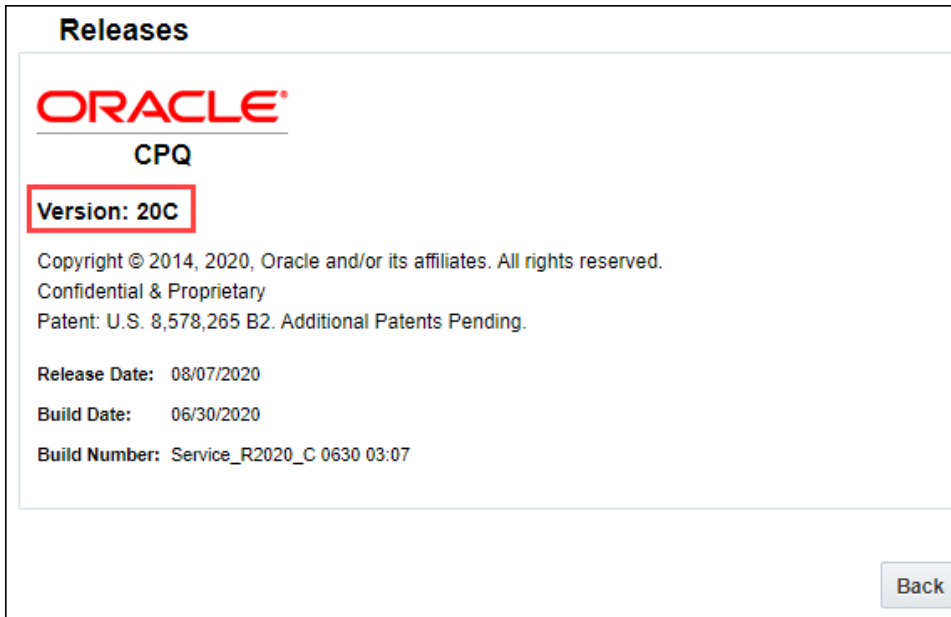
LOCATE THE ORACLE CPQ VERSION INFORMATION

To locate the CPQ version information, complete the following steps:

1. Log in to Oracle CPQ.
2. Navigate to the Admin Home page.



3. Click **CPQ Version Info**. The **Releases** page displays.
4. Note the **Version**.



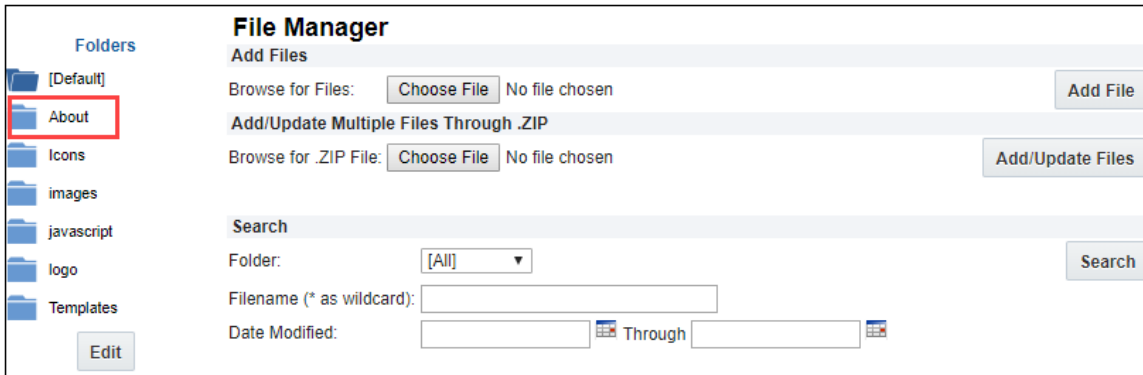
5. Click **Back**.

LOCATE THE REFERENCE APPLICATION INFORMATION

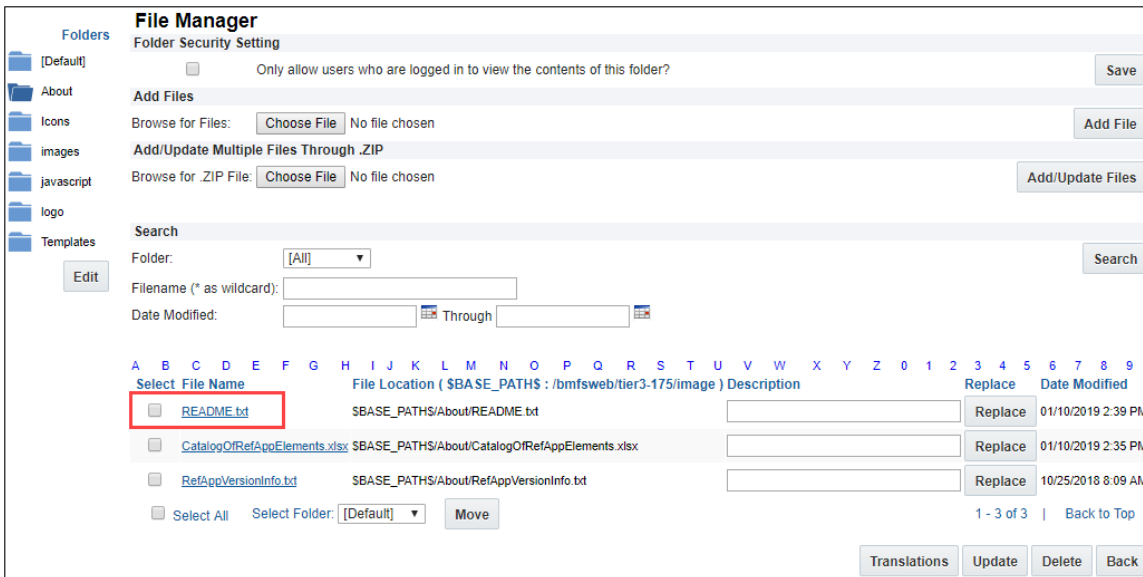
When an Oracle CPQ site is provisioned, the Ref App is pre-loaded into the environment. In addition, files are added to the File Manager which indicate the version of the Ref App that is provisioned and describes the change history for the Ref App. These files are used to identify if your site requires updating to connect to the latest Managed package.

To locate the current Reference Application Version Info and Read Me files, complete the following steps:

1. Log in to Oracle CPQ.
2. Navigate to the Admin Home page.
3. Click **File Manager** under **Utilities**. The File Manager page displays.



4. Click on the **About** folder.
5. From the list of files within the folder, click on the **README.txt** file. The README file opens.



6. Review the Oracle CPQ Reference Application version information to check if you have Base Ref App Version 4.0 or later.
7. (Optional) Return to the **About** folder and select the **RefAppVersionInfo.txt** file. The RefAppVersionInfo file opens. Review the change log and Ref App version information.
8. (Optional) Return to the **About** folder and select the **CatalogOfRefAppElements.xlsx** file. The CatalogOfRefAppElements file opens. Review the Microsoft Excel file which itemizes all of the elements contains in the latest Ref App.

My Oracle Support

My Oracle Support enables you to search Oracle's knowledge base, manage Service Requests (SRs) when you need assistance, and take advantage of proactive capabilities for managing systems. During the installation and setup of the Oracle CPQ Connector for Microsoft Dynamics 365, you will be directed to open a Service Request (SR) on [My Oracle Support](#). This section includes instructions on the following:

- Register in My Oracle Support
- Log an Oracle CPQ Connector for Microsoft Dynamics Service Request

REGISTER IN MY ORACLE SUPPORT

In order to log an Oracle Service Request (SR), you must have a Support Account with a registered Support Identifier (SI). An SI identifies the products that your company has purchased and the level of support that you are entitled to. The SI is included in the welcome letter sent from Oracle to the technical contact listed in your company's contract.

My Oracle Support (MOS) customer user accounts are managed by individuals within your organization in the role of Customer User Administrator (CUA). Most organizations have more than one CUA. The CUA approves or denies access to My Oracle Support by managing access to your company's SIs.

If you are the first user to register, you are prompted to accept the CUA role. You must accept the CUA role for your organization to proceed.

To access My Oracle Support, you must have an Oracle Single Sign On (SSO) account. This account is created when you complete the registration process on [oracle.com](#). For additional SSO account information, refer to [Requesting an Oracle Single Sign On Account](#).

Once you have your SSO account established, go to [My Oracle Support](#) to complete the MOS registration and initial sign in process to obtain your Support Account. Detailed instructions are provided in the following article, [Registration and Sign In](#).

LOG AN ORACLE CPQ CONNECTOR FOR MICROSOFT DYNAMICS 365 SERVICE REQUEST

Administrators will need to open Service Requests (SR) during the installation and setup of the Oracle CPQ/Dynamics integration. When opening an SR, it is important to provide all the relevant information required to ensure the Oracle support team can address the ticket in a timely fashion.

Note: You must have a Support Account with an approved Support Identifier (SI) to log a Service Request (SR). Refer to [Registration and Sign In](#).

To generate a CPQ Connector for Dynamics SR, complete the following steps:

1. Navigate to the [My Oracle Support](#) (MOS) website.
2. Sign in using your MOS Support Account credentials.
3. Locate the **Service Request** tab and click **Create SR**.

4. Enter a Problem Summary and Problem Description.

FIELD	DESCRIPTION
Problem Summary	A short description of the problem.
Problem Description	A detailed description of the problem, including the following information: <ul style="list-style-type: none">• Solution name (for example, Oracle CPQ Connector for Microsoft Dynamics 365)• Solution version• Oracle CPQ version• Issue type (for example, Setup, Upgrade, Migration, or Troubleshooting)• If Setup, provide the last step completed in the guide• If Upgrade or Migration, provide the previous version of the managed package• If Troubleshooting, provide the steps to reproduce the error

5. Select the **Cloud** tab within the **Where's the Problem** section.
6. Select **Oracle BigMachines CPQ Service** for the **Service Type**.
7. Select **Integration** and **General Integration** from drop down for the **Problem Type**.
8. Enter your **Support Identifier**.
9. Enter the **Severity** as **3-Minor Loss of Service**.
10. Click **Next**.
11. Follow the remaining steps as prompted.

Note: Refer to [log an SR](#) online help articles for further assistance.

INSTALLATION

To begin configuring the Oracle CPQ Connector for Microsoft Dynamics 365 there are two (2) packages to install.

1. The Oracle CPQ Connector Solution must be imported into Microsoft Dynamics.
2. The Dynamics Integration Migration Package must be imported into Oracle CPQ.

Each of these can be downloaded from [My Oracle Support](#) at: [Oracle CPQ - Dynamics 365 Implementation Guides \(Doc ID 2364513.1\)](#).

Notes:

- Always install and test in a Sandbox environment before making any changes in production.
- If you use multiple Microsoft logins, you should log out of any active sessions before beginning the installation.

Import the Oracle CPQ Connector Solution into Dynamics

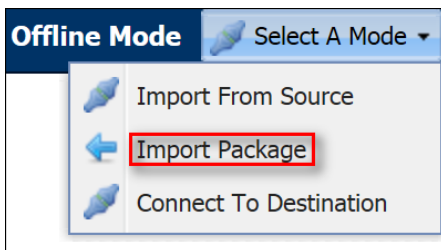
To import the Oracle CPQ Connector for Microsoft Dynamics 365 into your Dynamics 365 environment complete the following steps:

1. Login to the target Dynamics 365 site as an administrator.
2. Navigate to **Settings > Solutions**.
3. Import the Solution. For detailed instructions on these procedures, refer to the Microsoft Dynamics documentation article [Import, update, and upgrade a solution](#).

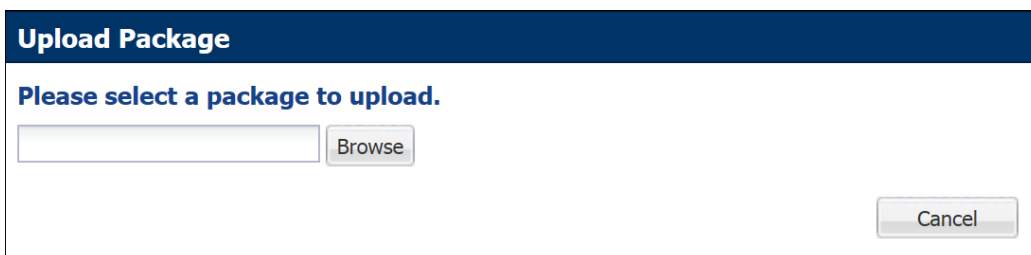
Import the Microsoft Dynamics Integration Package into Oracle CPQ

To use the Migration Center to import the Microsoft Dynamics Integration package complete the following steps:

1. Download the Microsoft Dynamics 365 migration package to your computer.
2. Open the Admin Home page.
3. Under **Utilities**, select **Migration**. The Migration Center opens.
4. From the **Offline Mode** drop-down menu, select **Import Package**.



5. From the **Upload Package** dialog, click **Browse**.



6. Select the downloaded package from your computer.
7. Click **Open**.

8. From the **Upload Package** dialog, select a target process for cross process migration from the drop-down list.

Note: If you choose **Default Migration** for the target cross process migration, you will have some of the Commerce process migration elements but not the full Commerce process. Therefore, we recommend you select a target process for cross process migration.

Name:	Microsoft Dynamics Integration
Package Version:	1
Site Version:	18.1.0
Description:	
Release Date:	02/12/2018
Dependencies:	None

9. Click **Upload**.

10. Click **Migrate**. The Migration dialog opens.

11. (Optional) Enter a **Migration Description**.

Send Notification?

Include Snapshot?

12. Click **Migrate**.

13. Monitor the progress of the migration in the **Status** area at the bottom of the page.

14. When the migration completes, click **Logs** at the bottom of the page.

The Migration Logs window opens and indicates the success or failure of the migration.

AUTHENTICATION

Now that you have installed the Oracle CPQ Connector for Microsoft Dynamics, there are additional setup procedures required to enable your Dynamics environment and Oracle CPQ site to communicate securely.

Oracle CPQ supports the use of Azure Active Directory to provide secure authentication and single sign-on for Dynamics users with a valid CPQ license allowing them to access their CPQ content without leaving Dynamics. To successfully establish a connection, you need to setup Azure Active Directory.

Setup Azure Active Directory

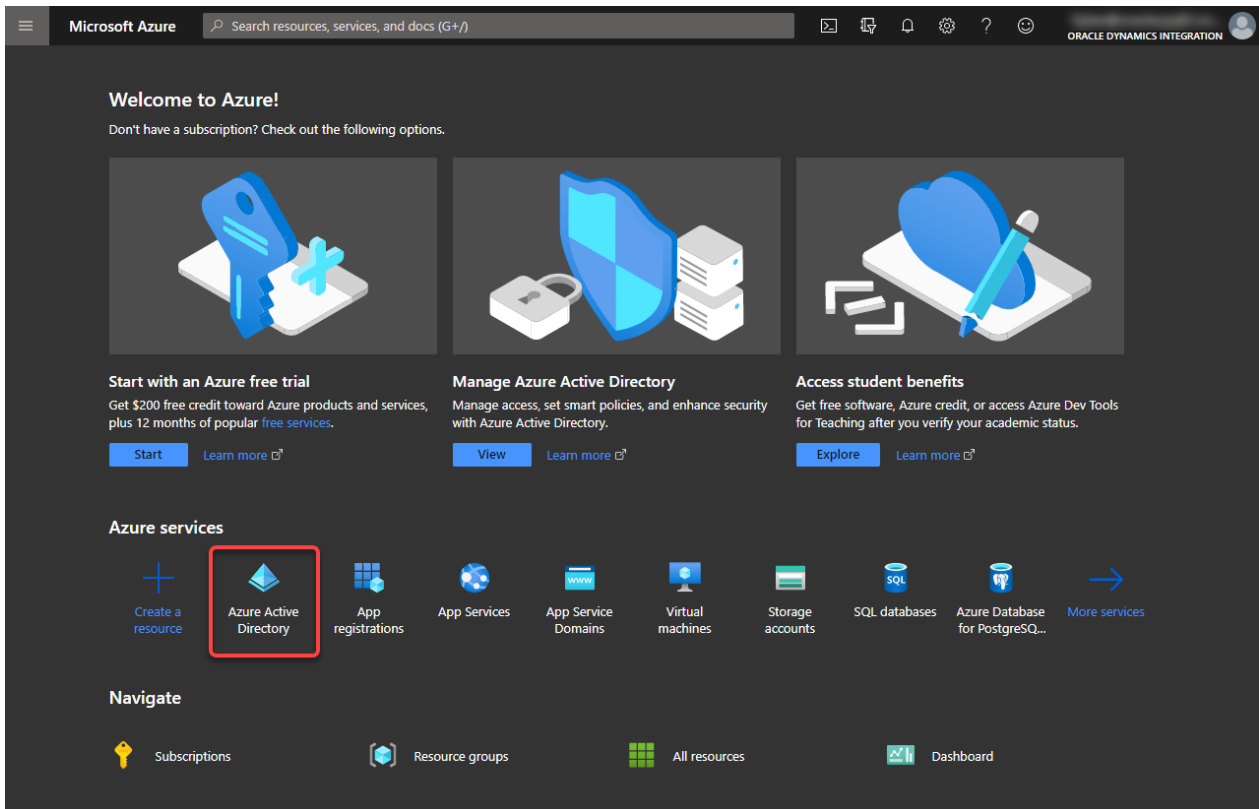
This section provides instructions for configuring Azure Active Directory to authenticate with Oracle CPQ. To complete this, you will perform the following steps which are outlined in their own sections called:

1. [Create an App Registration](#)
2. [Define API Permissions](#)
3. [Create a Client Secret](#)
4. [Locate the Client ID and Tenant ID](#)
5. [Locate the Identity Provider URI](#)
6. [Locate the Resource URI and App ID](#)
7. [Provide Dynamics and Azure Active Directory Details to My Oracle Support](#)

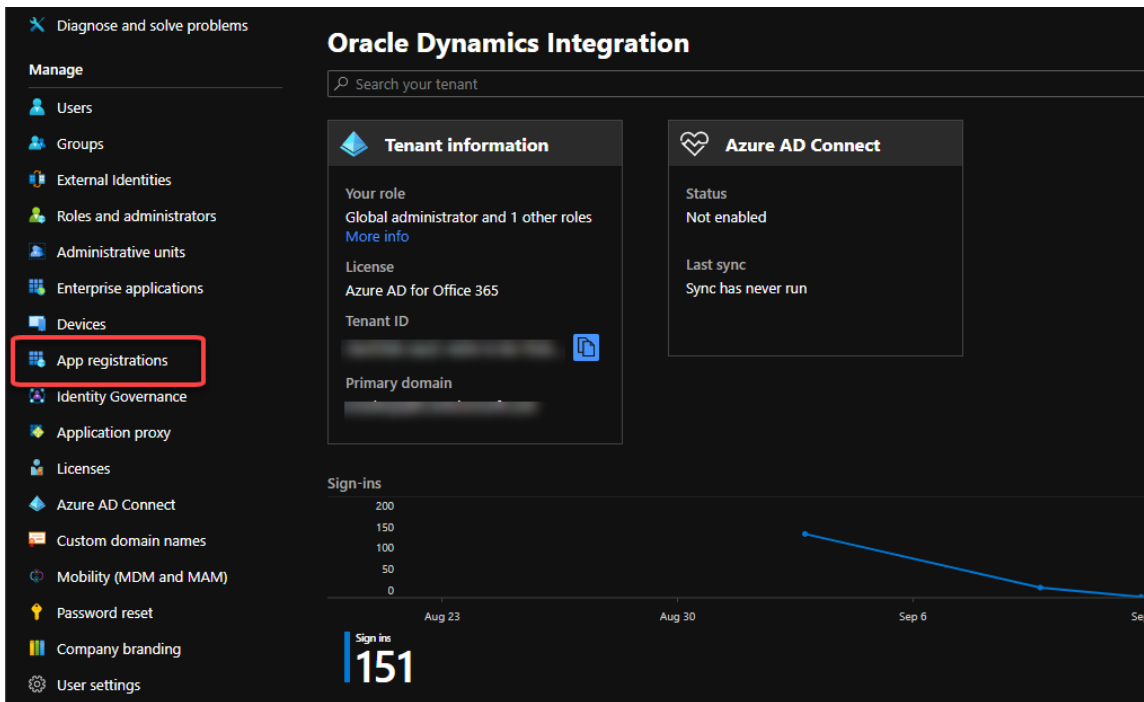
CREATE AN APP REGISTRATION

To register your Oracle CPQ site in the Azure Active Directory so that it can authenticate and modify Dynamics data, complete the following steps:

1. Log in to Microsoft Azure at <https://portal.azure.com>.

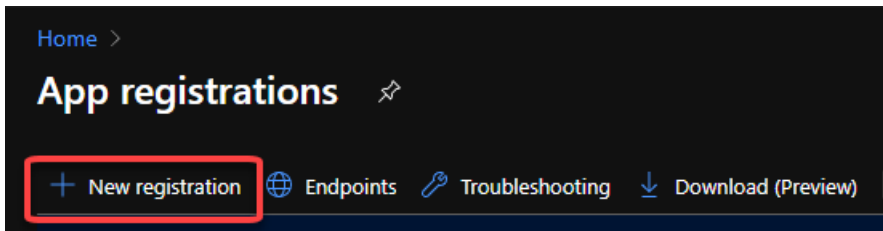


2. Navigate to **Azure Active Directory > App registrations.**

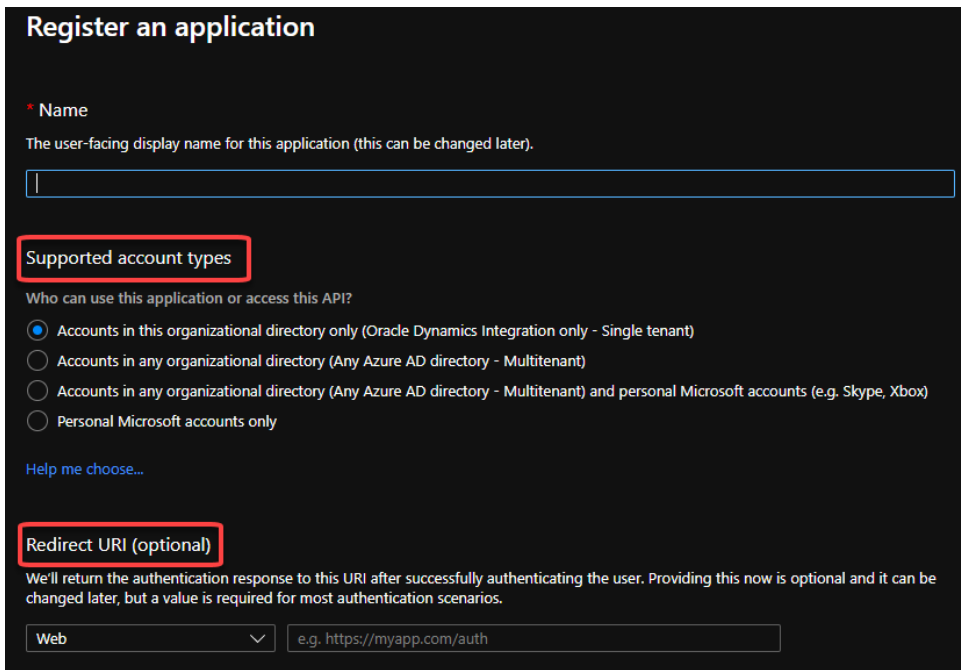


Microsoft Azure Portal

3. Click **New registration.**



4. The Register an application page opens.



- Enter the following values to create the App Registration.

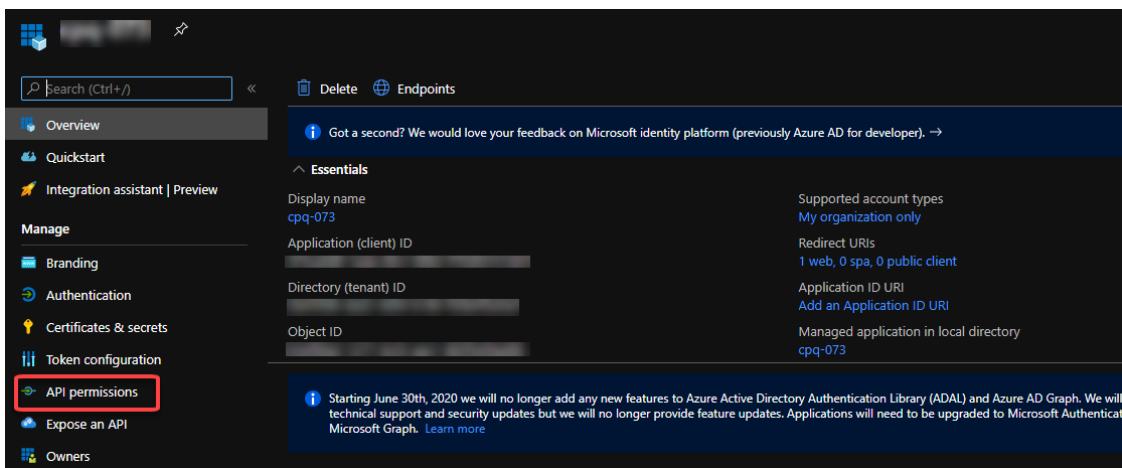
SETTING	VALUE
Name	Descriptive name for the app
Supported Account Types	Choose appropriate access level. Default: Accounts on this organizational directory only – Single tenant.
Redirect URI (Web)	https://<cpq_site_domain>/admin/oauth2/dynamics365/oauth_callback.jsp

- Click **Save**.

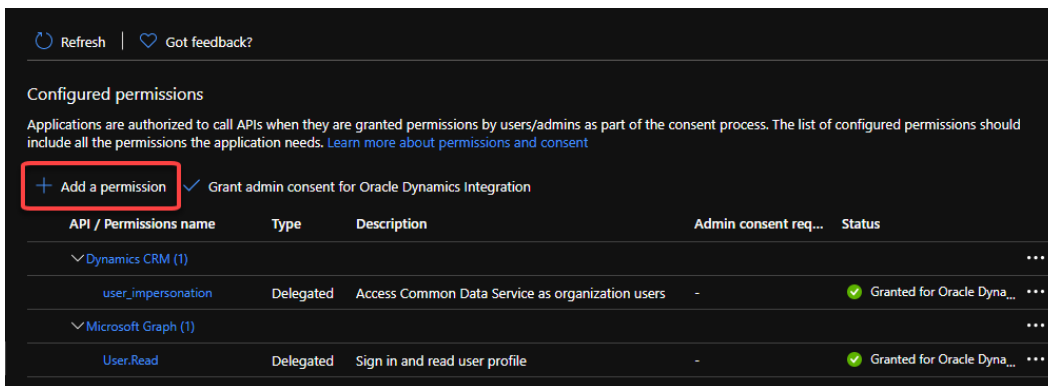
DEFINE API PERMISSIONS

To define the API permissions for this App Registration, complete the following steps:

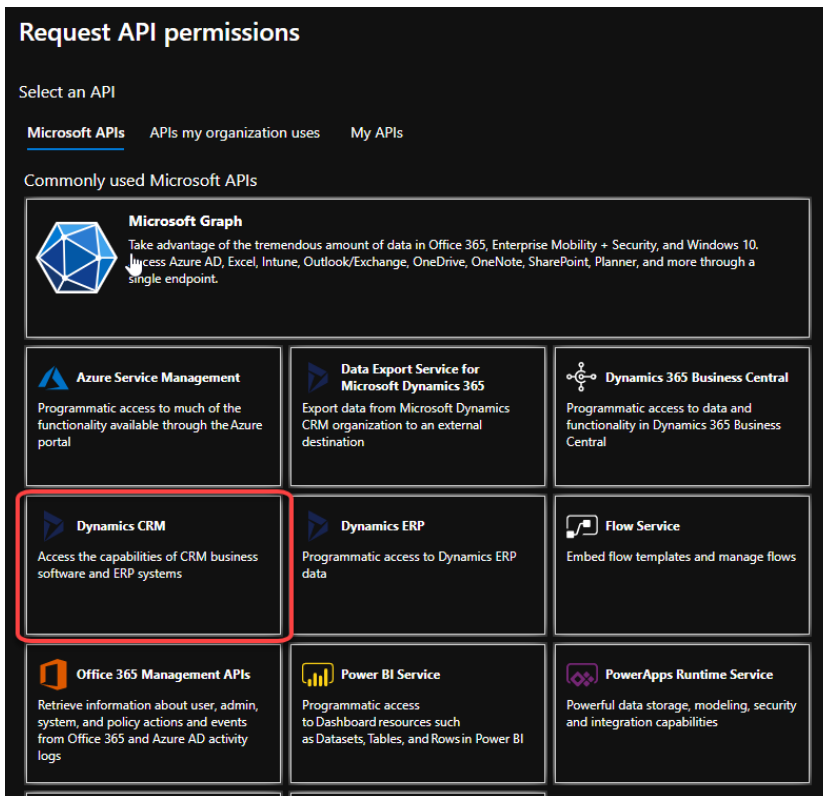
- Open the App Registration defined in the previous section.



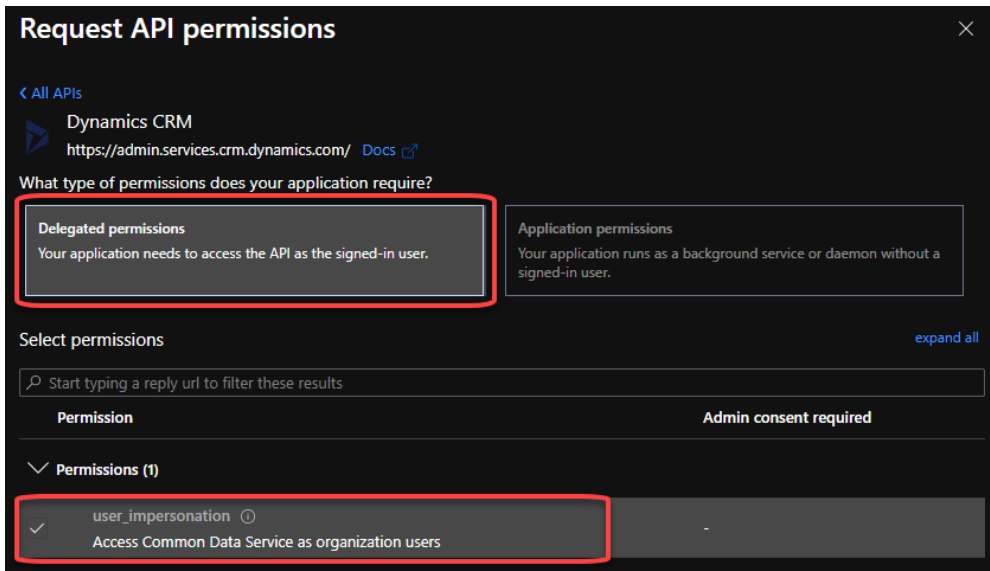
- Navigate to **API Permissions**.



3. Click **Add a permission**.



4. Select **Dynamics CRM**.

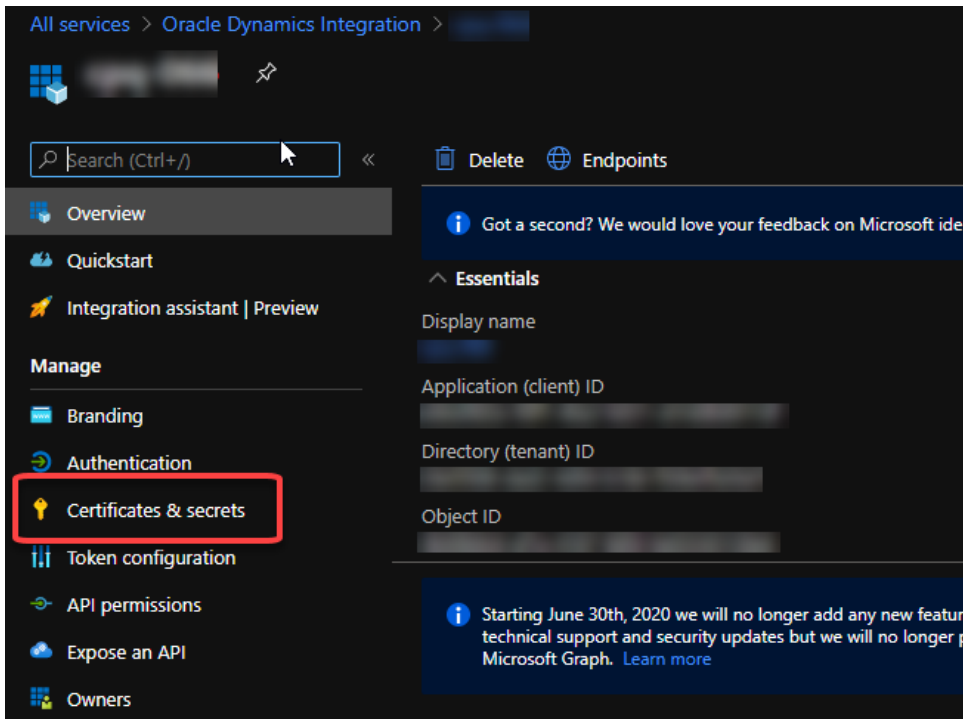


5. Select **Delegated Permissions**, check **user_impersonation**.
6. Click **Add permission**.
7. Optionally, you can grant admin consent for your entire organization.

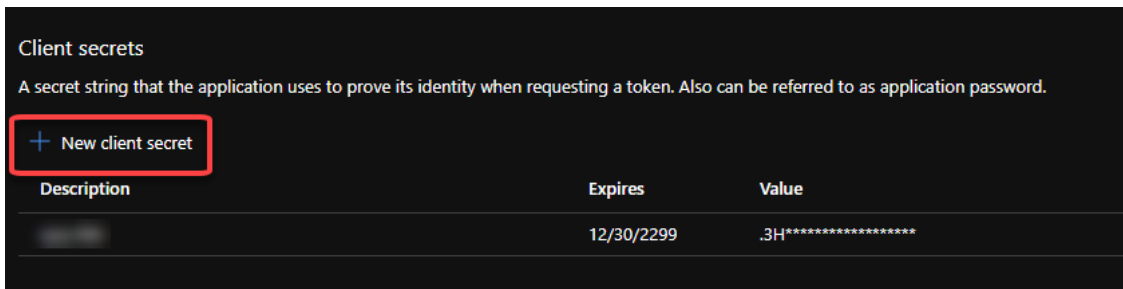
CREATE A CLIENT SECRET

To create a client secret for this App Registration, complete the following steps.

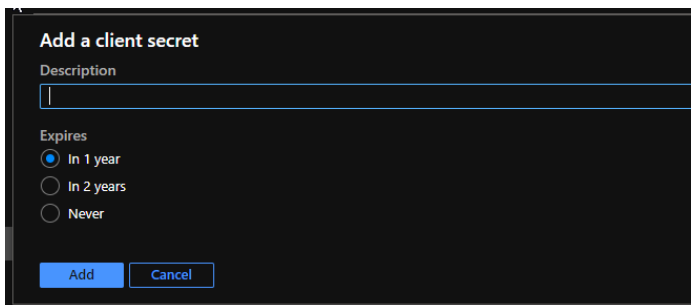
1. Open the App Registration defined in the earlier section.



2. Navigate to **Certificates & secrets**.

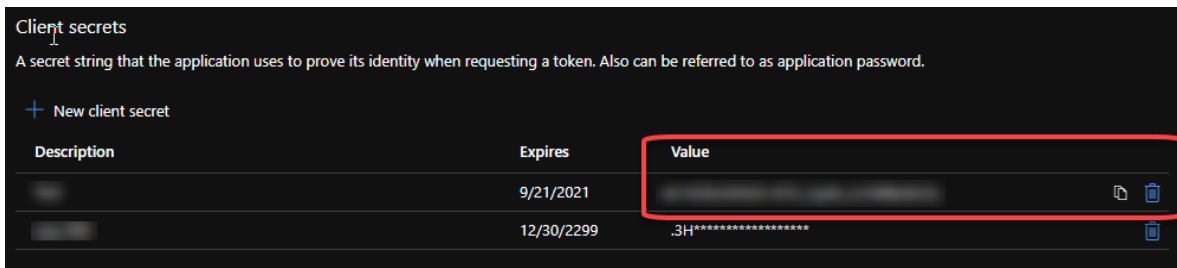


3. Click **New client secret**.



4. Provide a descriptive name and choose the desired expiration timeframe. Oracle recommends selecting **Never** so that this does not need to be updated regularly. Click **Add**.

- The new client secret is displayed.

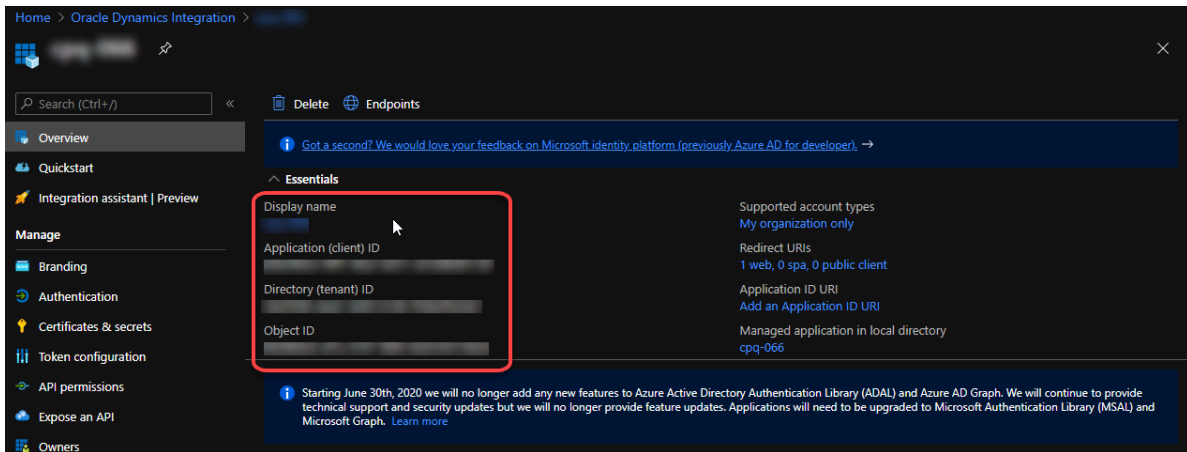


- Record the **value** displayed. Once you leave this page you will no longer be able to view this secret, so it is important that you capture this value now.

LOCATE THE CLIENT ID AND TENANT ID

You must look up the Client ID and the Tenant ID for the App Registration that you previously created.

- Open the App Registration defined in the earlier section.
- View the Overview for the App Registration.



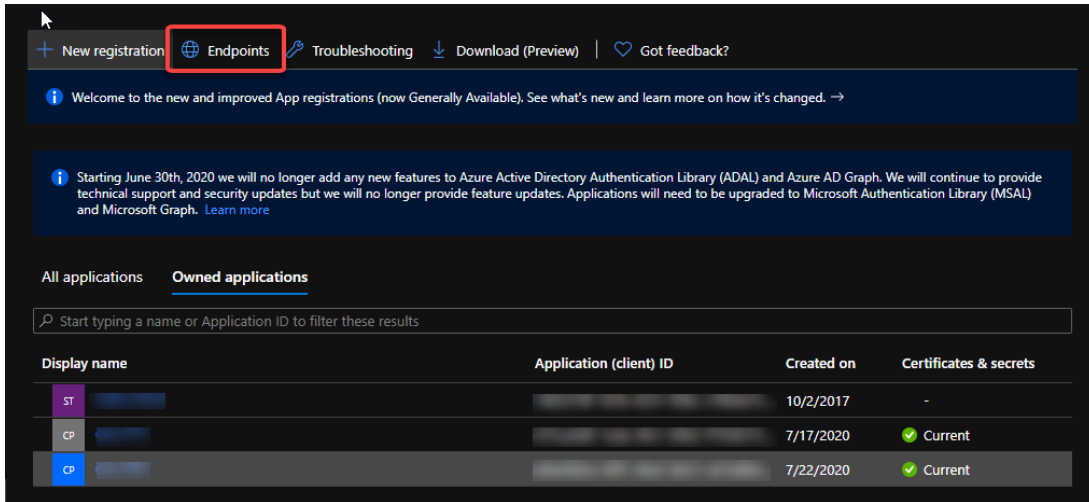
- Record the **Application (client) ID** and **Directory (tenant) ID**.

Note: The tenant ID shown above and the tenant name displayed under **Custom domain names** are interchangeable. Microsoft accepts both the Azure Portal's domain name and the ID as acceptable tenants. The values both point to the same location.

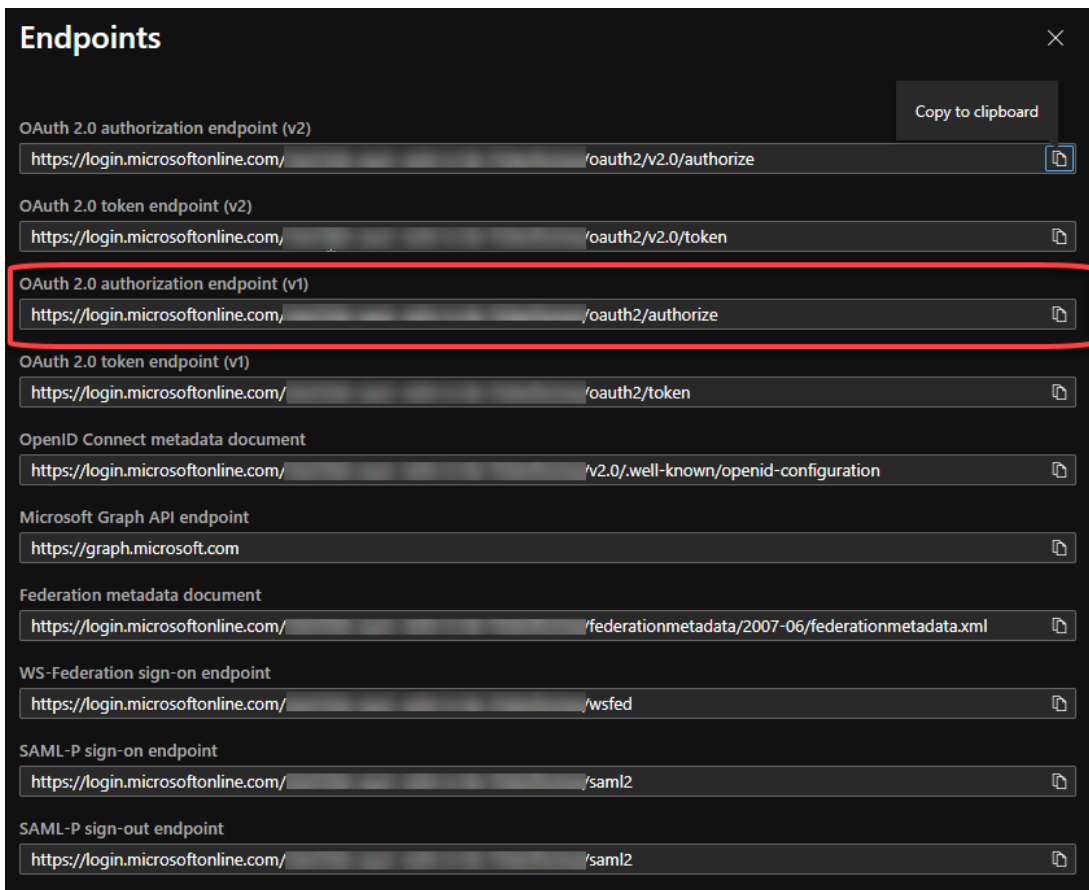
LOCATE THE IDENTITY PROVIDER URI

You must look up the Identity Provider URI for the App Registration that you previously created.

1. Open the App Registration defined in the earlier section.
2. Navigate to the **Endpoints** page.



3. The Endpoints page displays.



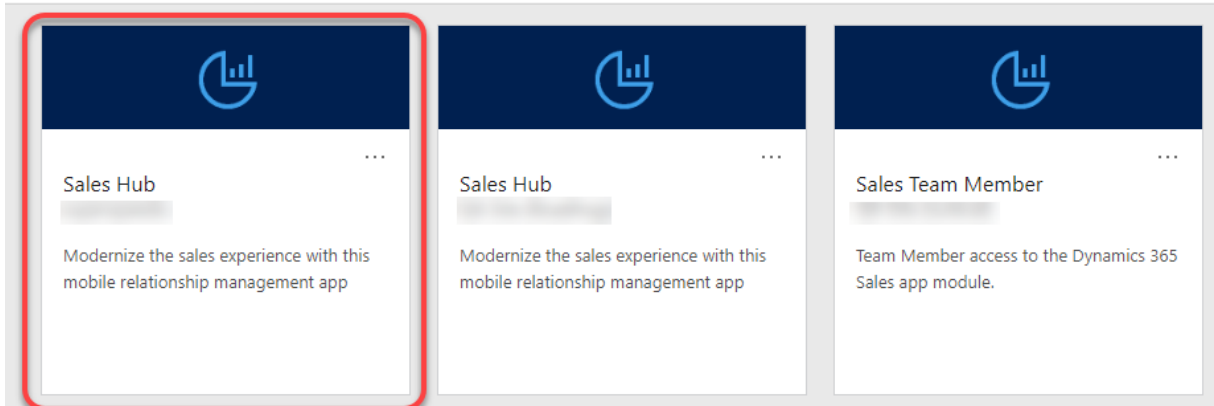
4. Copy the **OAuth 2.0 authorization endpoint (v1)** value, it will be of the format:
`https://login.microsoftonline.com/38ef3fd8-dad2-4d94-b186-f508effa50af/oauth2/authorize`
5. Extract the **Identity Provider URI**, which will be the domain that is highlighted in **yellow**.

LOCATE THE RESOURCE URI AND APP ID

You must look up the Resource URI and the App ID for your Dynamics 365 for Sales app. The Resource URI is the environment to which the app registration has data access, which is either the Dynamics 365 for Sales production or sandbox environment. The App ID is a unique identifier for the Model-driven Sales Hub app.

Complete the following steps:

1. Log into Microsoft Dynamics 365 Home at <https://home.dynamics.com/>



2. Locate the Sales Hub app for the Dynamics instance that you are trying to connect, this may be a production or a sandbox environment. Click on the app. The Sales Hub home screen is displayed.
3. Copy the URL from the browser window on the home screen, it will be of the format:
`https://mysite.crm.dynamics.com/main.aspx?appid=b3700bc4-45f7-e811-a953-000d3a4e8995&pagetype=dashboard&id=2701de60-8f2a-48a4-8262-4a35ca7441fa&type=system&_canOverride=true`
4. Extract the **Resource URI**, which will be the domain that is highlighted in yellow, and the **AppID** which will be a querystring parameter with the name `appid`, which is highlighted in green. Record these values.

PROVIDE DYNAMICS AND AZURE ACTIVE DIRECTORY DETAILS TO MY ORACLE SUPPORT

Once you have gathered the Client Secret, Client ID and Tenant ID, Identity Provider URI, Resource URI and App ID, you can finalize the integration process. My Oracle Support must fulfill the support portal ticket in order for the Oracle CPQ/Dynamics integration can be tested.

Note: You must have a **Support Account** with an approved **Support Identifier (SI)** to log a Service Request (SR).

To complete the integration, complete the following steps:

1. Generate an SR from the [My Oracle Support](#) (MOS) website. Refer to [Log an Oracle CPO Connector for Microsoft Dynamics 365 Service Request](#) and specify the following field designations.
2. Select **Site Maintenance > Site Setting Changes** for the **Problem Type**.
3. Enter the **Consumer Key** into the **Microsoft Dynamics Client Key** field.
4. Enter the **Consumer Secret** into the **Microsoft Dynamics Consumer Secret** field.

Integration User Pairing

Once the Service Request in the [previous section](#) has been fulfilled, connect the Integration User (typically a SuperUser or dedicated integration user in CPQ) to their corresponding Dynamics user account (typically a system administrator or a dedicated integration user).

If you have additional user accounts you'd like to pair manually, each user will individually follow the steps in the next section to pair their logins by generating a security token. You typically perform this step for your Integration User account first.

Note: Do not proceed with this process until Oracle CPQ Support has completed the Service Request to establish the security and connected app. Refer to [Provide Dynamics and Azure Active Directory Details to My Oracle Support](#).

PAIR INTEGRATION USER AND GENERATE ACCESS TOKEN

The first step for integrating users is to pair the user accounts across systems. This is done by entering the Dynamics username that corresponds to the CPQ user on the User Integration page. If you do not currently have a user account in both systems, create a user account in each before continuing or contact your system administrator.

User accounts must be paired before a user can SSO from Dynamics into Oracle CPQ. When a user punches into CPQ from Dynamics the first time an Access Token is automatically generated, however during the initial setup the Integration User will need to manually generate their access token to push data from CPQ to Dynamics using their APIs.

Once a user has generated this token, they will continue to be able to sign on from Dynamics and sync data back to Dynamics from CPQ even after their Dynamics or CPQ user password changes. In this section, we describe how to manually generate the token.

Note: Before you begin, log out of all Dynamics instances so that you do not accidentally pair to the wrong user account or instance.

To pair a user and generate a token, complete the following steps:

1. Log into Oracle CPQ with your Integration **Username** and **Password**.



Oracle CPQ Login

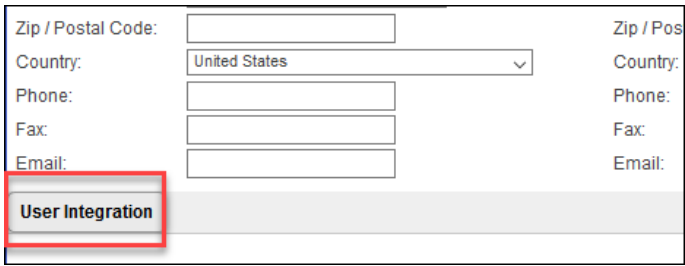
2. Click the **My Profile** icon in the Navigation bar at the top of the page.



My Profile Icon

Note: The **My Profile** icon and location may vary based on your CPQ site configuration.

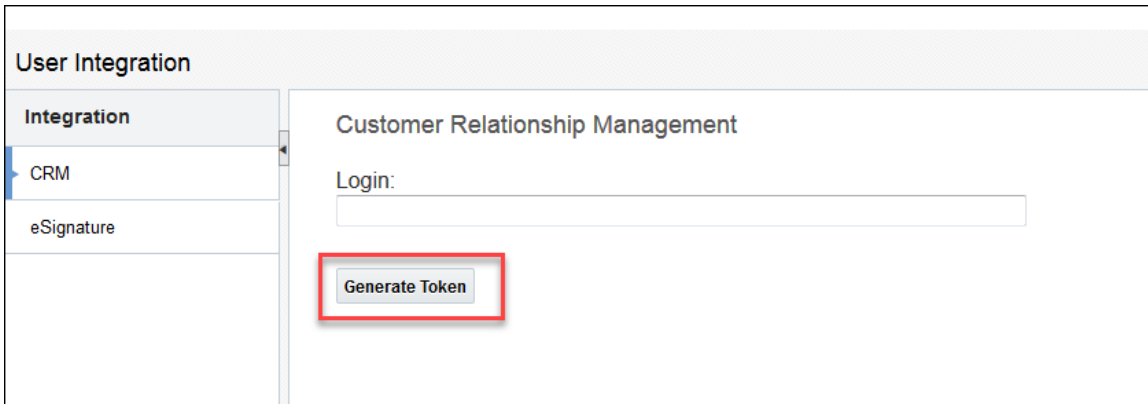
3. Click **User Integration**.



Zip / Postal Code: Zip / Pos
Country: Country:
Phone: Phone:
Fax: Fax:
Email: Email:
User Integration

My Profile – User Integration

4. Enter your **Dynamics username** in the **Login** field.
5. Click **Generate Token**.



User Integration

Integration

- CRM
- eSignature

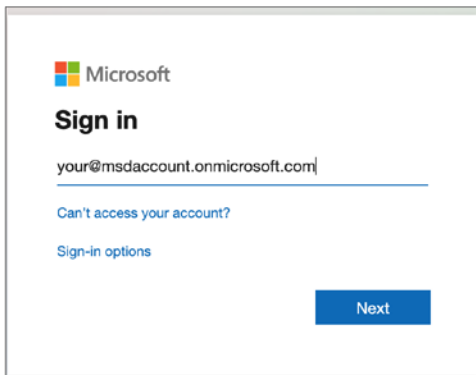
Customer Relationship Management

Login:

Generate Token

User Integration – Generate Token

6. Log in to **Dynamics** with the sign in and password credentials for the user account you want to integrate.



Microsoft

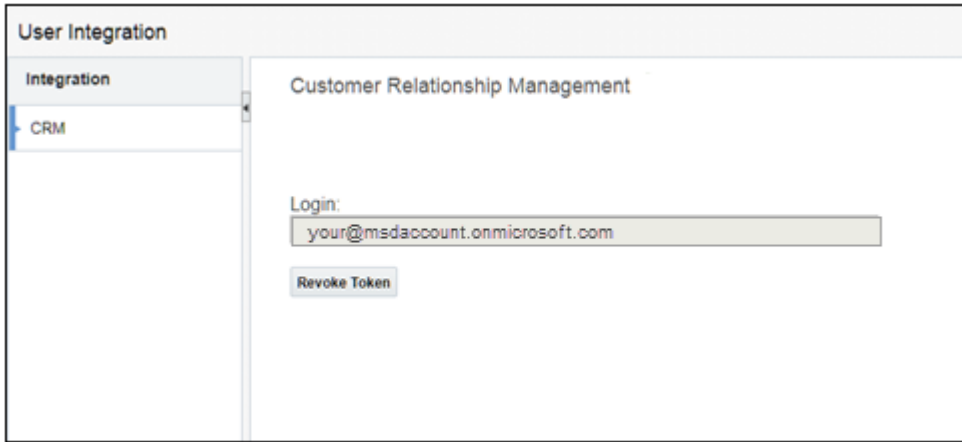
Sign in

[Can't access your account?](#)

[Sign-in options](#)

Next

The **User Integration** page displays showing the Revoke Token button that indicates that the token has been generated.



Note: You will need to repeat steps 1-4 for any additional users who wish to access Oracle CPQ from within Dynamics. The remaining steps to generate a token are optional as the token will be automatically generated for that user when they first punch into CPQ. If you try to access Oracle CPQ from Dynamics with a user that has not been paired, they will see errors when trying to open quotes. Review [User Pairing](#) for more detail.

PERMISSIONS AND PAGE LAYOUTS

You must assign the new admin roles to your own profile. Only then can you access and configure the components of the managed solution. Once you have access to the components you must expose them in the UI by adding them to navigation menu and forms.

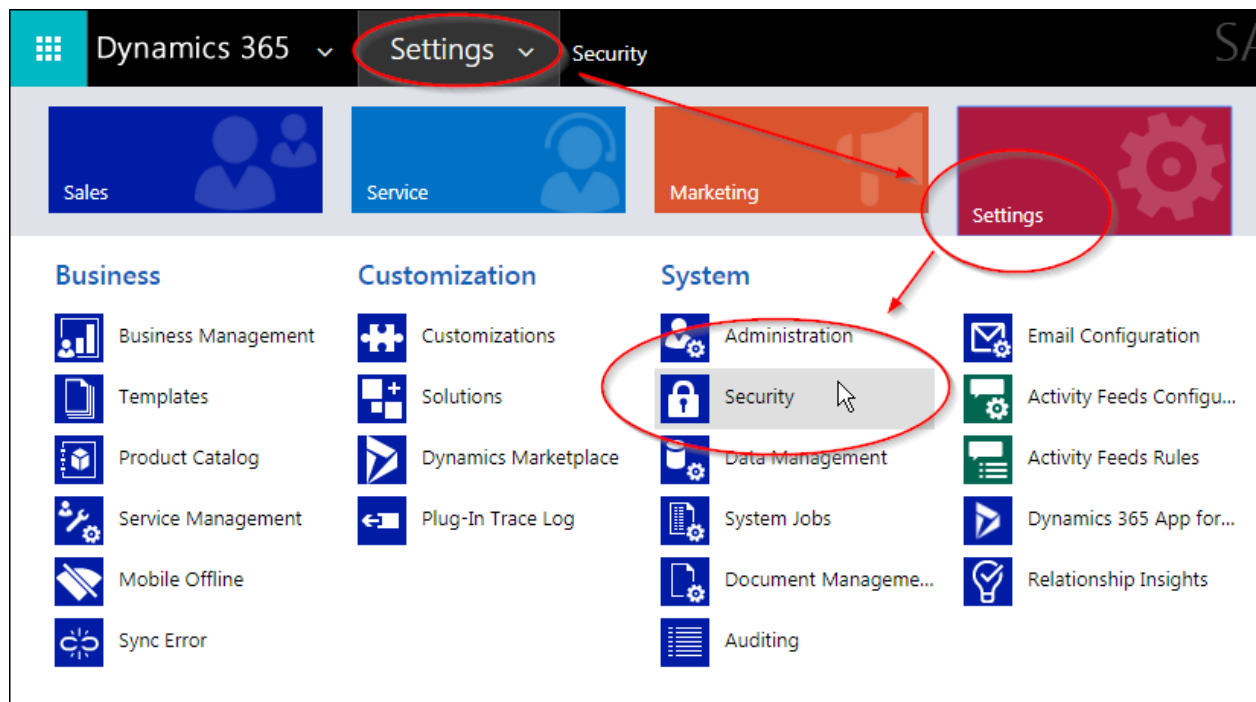
Assign the Oracle CPQ Admin Role

You must assign the CPQ Admin role to admin users, including your own user, in order to access and configure the Oracle CPQ Connector for Microsoft Dynamics 365.

Note: The below procedure assumes users have already been created in Office 365. If you have not previous created users, you must do so before completing these steps.

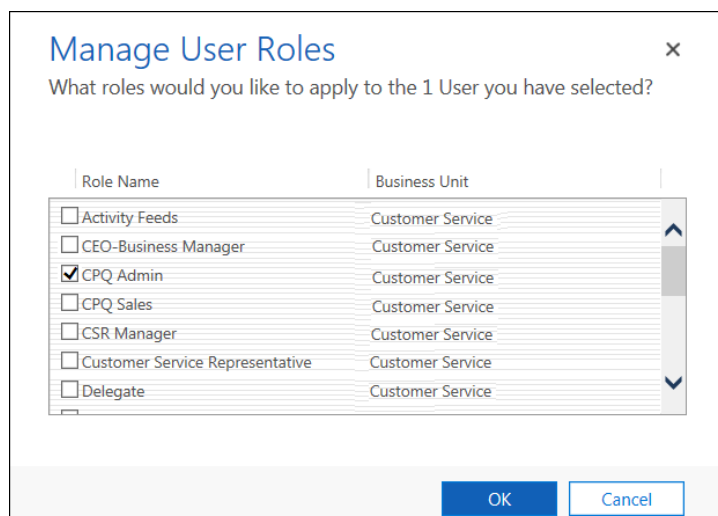
To assign the CPQ Admin role, complete the following steps:

1. Log into Dynamics 365 as an administrator.
2. From the Navigation bar, go to **Settings > Security**.



3. From the **Security** page, select **Users**.
4. Select the user whose roles you want to adjust. The **User** page opens.

5. Select **Manage Roles**. The **Manage User Roles** dialog opens.



6. Assign the **CPQ Admin Role** to the target users including your own admin user.

This role grant access rights to the objects listed in the following table.

OBJECT	PERMISSION ENABLED
Opportunity	Create, Read, Update, Delete
CPQ Site Settings	Create, Read, Update, Delete

These permissions additionally grant access to a number of Customization features which are required for the proper function of the managed package.

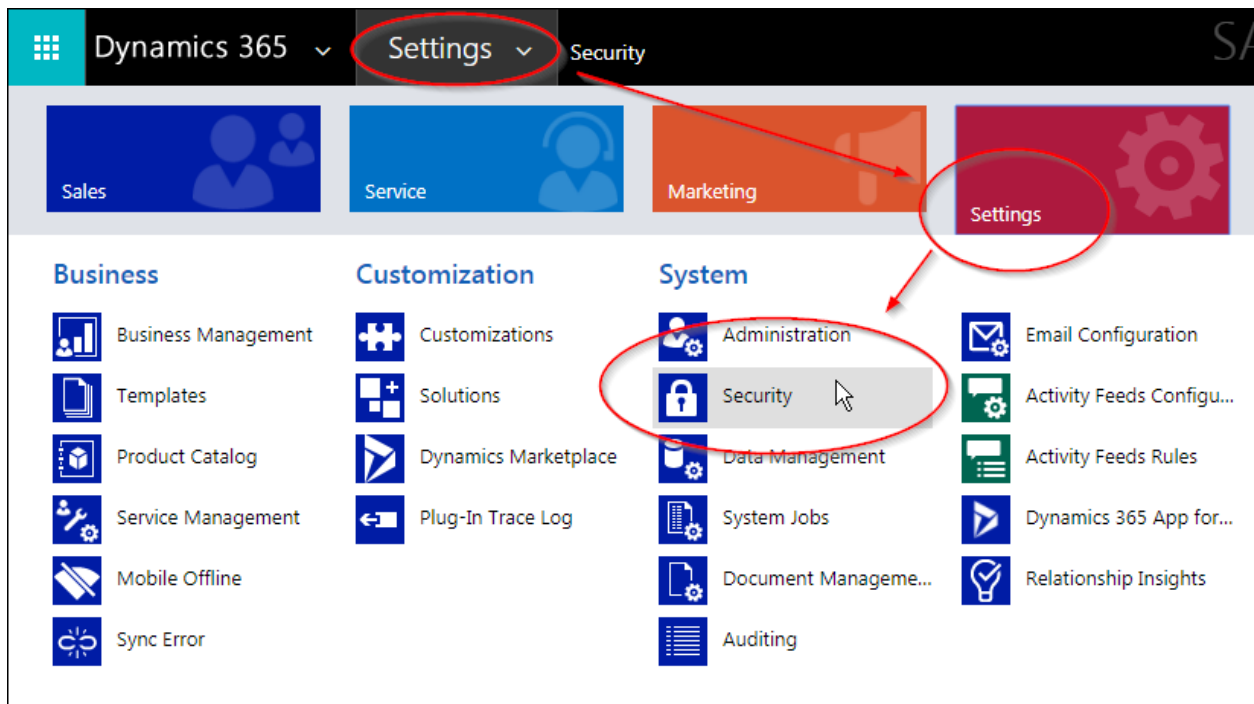
Assign the Oracle CPQ Sales Role

You must assign the CPQ Sales role to sales users, as well as your own user, in order to create quotes and test the end to end integration. Additionally, when you're ready to roll Oracle CPQ out to the entire sales organization you will need to repeat this step for every user who will be a Oracle CPQ user.

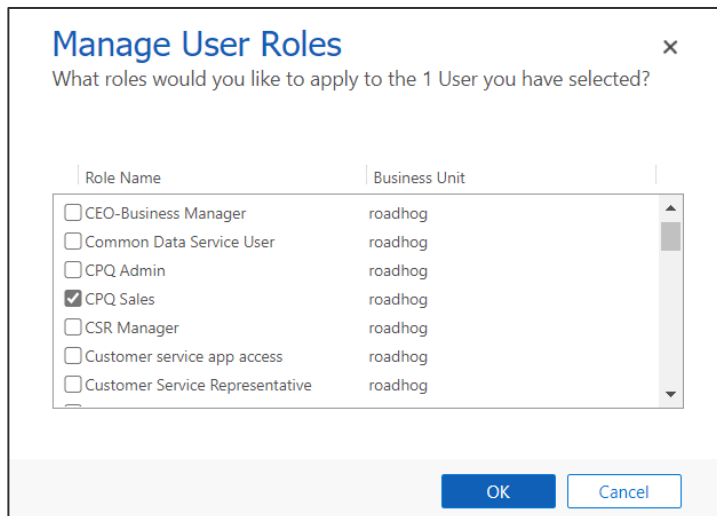
Note: The below procedure assumes users have already been created in Office 365. If you have not previous created users, you must do so before completing these steps.

To assign the Oracle CPQ Admin role, complete the following steps:

1. Log into Dynamics 365 as an administrator.
2. From the Navigation bar, go to **Settings > Security**.



3. From the **Security** page, select **Users**.
4. Select the user whose roles you want to adjust. The **User** page opens.
5. Select **Manage Roles**. The **Manage User Roles** dialog opens.



6. Assign the **CPQ Sales Role** to the target users including your own admin user.

This role grant access rights to the objects listed in the following table.

OBJECT	PERMISSION ENABLED
Opportunity	Create, Read, Update, Delete
Oracle Quotes	Create, Read, Update, Delete, Append, Append To, Assign, Share
CPQ Site Settings	Read, Append, Append To

These permissions additionally grant access to a number of Customization features which are required for the proper function of the managed package.

Setup Page Layouts

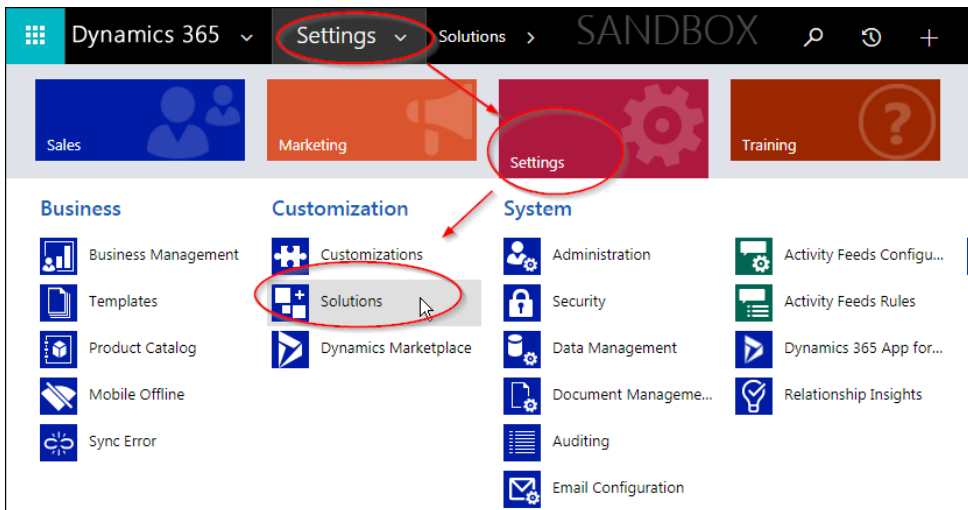
Now that you have access to the new entities, you must expose these entities in the Dynamics User Interface.

EXPOSE ORACLE CPQ SITE SETTINGS

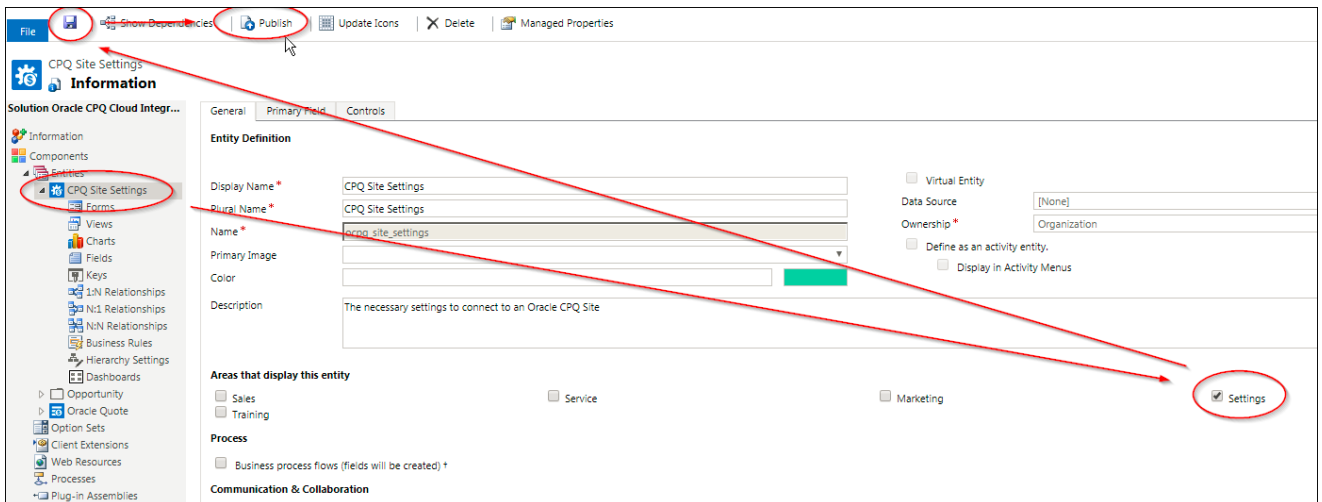
A CPQ Site Settings entity is provided for administrators to simplify the setup and integration of their company's instance of Oracle CPQ. Administrators must manually expose the CPQ Site Settings entity in Dynamics 365.

Complete the following steps:

1. Open Dynamics 365.
2. From the Navigation bar, go to **Settings > Solutions**.



3. From the **All Solutions** page, select **Oracle CPQ Connector** for Dynamics 365.
4. From the list of components, select the **CPQ Site Settings** entity.
5. Under **Areas that display this entity**, select **Settings**.



6. Click **Save**.
7. Click **Publish**.

Note: Reminder, the logged in user must have been granted security access to the CPQ Site Settings entity in order to access it.

ADD ORACLE QUOTE ENTITY TO OPPORTUNITY LAYOUT

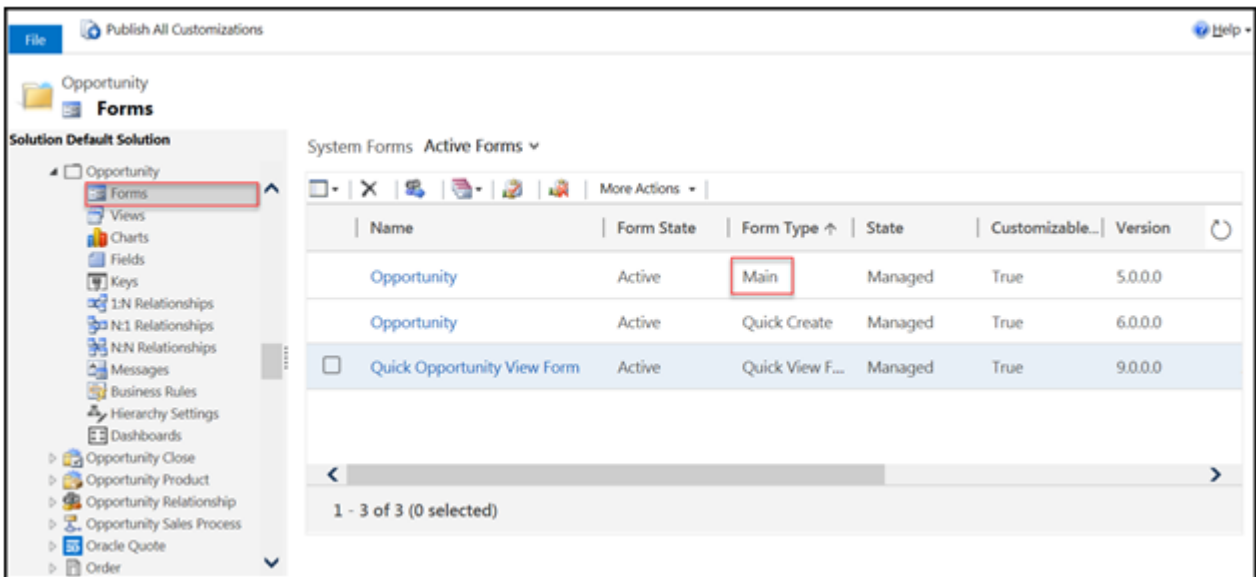
An Oracle Quote entity is provided for initiating new quotes and storing synced quote data. You must add the Oracle Quote entity to the Opportunity layout so that you can view the create quote action and to see a list of quotes that are linked to the open opportunity.

Complete the following steps:

1. Open Dynamics 365.
2. From the Navigation bar, go to **Settings > Customizations**. The **Customization** page opens.



3. Select **Customize the System**. The **Information** page opens.
4. Expand the **Opportunity** entity and select **Forms**.

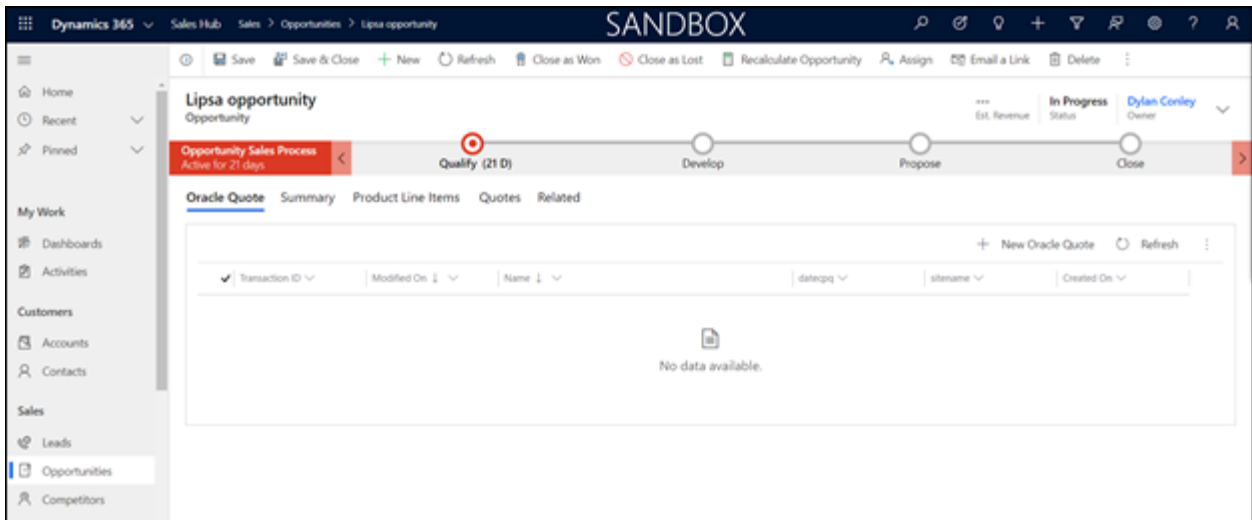


5. Open the **Main** form.

- From the **Insert** menu, select **Sub-Grid**. The **Set Properties** dialog opens.

- In the **Name** field, specify a unique name for the sub-grid.
- From the **Records** drop-down, select **Only Related Records**.
- From the **Entity** drop-down, select **Oracle Quotes (Opportunity ID)**.
- From the **Default View** drop-down, select **Active Oracle Quotes**.
- Click **OK**.
- From the **Home tab** of the form, select **Publish**. The Oracle Quote displays within the active Opportunity.

Opportunity - Legacy Web Client



Opportunity – Unified Interface

13. Optionally, you can repeat this process to add the Oracle Quote list to the Account form. Before doing so you will need to ensure that there's a relationship created from the Account to the Oracle Quote.

INTEGRATION SETTINGS

In order to sync data between Oracle CPQ and Dynamics, you must set up the relationships between the objects, actions and fields that are used in each system. Some of these settings are managed in Oracle CPQ and others in Dynamics. The following sections walk you through the set up within each system.

Note: The following sections assume that the CPQ site has been provisioned with the latest Oracle CPQ Base Reference Application. If you do not have the latest Reference Application (Ref App) on the site, additional undocumented setup steps may be required.

Oracle CPQ Site Settings

The CPQ Site Settings page, that is part of the managed solution, is a form filled out by the administrator. Data specific to your environments is entered, such as the Site Domain and Process Name. This initial setup allows you to quickly connect your Oracle CPQ and Dynamics environments.

Note: Most of the setup steps will be documented using the legacy customization interface, Microsoft is rolling out a newer experience for system customization. Administrators should use the interface they are most comfortable with, however some of the steps may be different than documented depending on the chosen interface.

RETRIEVE ORACLE CPQ INTERGATION PARAMETERS

Before entering the Oracle CPQ Site Settings, you must retrieve the Version ID from CPQ for the Commerce Process that you want to pair to Dynamics.

To retrieve your integration parameters, complete the following steps:

1. Log in to Oracle CPQ as an admin.
2. Navigate to the **Admin home page > Commerce and Documents > Process Definition**. The **Processes** page displays.
3. Select the desired process and select **Integrations** from the **Navigation** drop-down.
4. Click **List**. The **Integrations** page displays.
5. Click **View Parameters**. The parameters display.
6. Collect the information below. This information is needed to create site settings.

```
<script>
//initialize url variables
bm_site = "cpq-073";
url = "https://cpq-073.us.oracle.com/commerce/buyside/";

//copy specific values
process_id= "4356122";
action_id_copy= "4356758";

//open specific values
action_id_open="4356755";
document_id="4356178";

//version id for copy
version_id="15514396";

//create specific values
process= "transaction_bmClone_2";
</script>
```

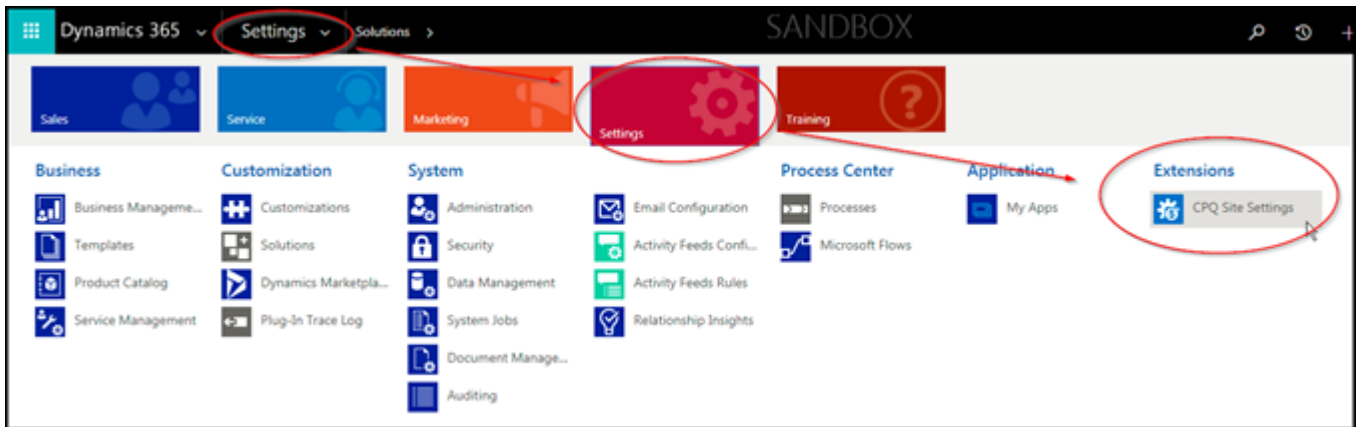
Sample Integration Parameters Output

CREATE ORACLE CPQ SITE SETTINGS

Next you must input the integration parameters into the Oracle CPQ Site Settings page. When creating Oracle CPQ Site Settings, administrators are supplying information about the CPQ site, process and actions that is being integrated. These properties will be used when punching into when creating and editing quotes.

Complete the following steps:

1. Open Dynamics 365.
2. From the Navigation bar, go to **Settings > CPQ Site Settings**.



3. From the top left of the **Active CPQ Site Settings** page, click **New**. The **New CPQ Site Settings** page opens.

A screenshot of the 'New CPQ Site Settings' form. The title is 'CPQ SITE SETTINGS : INFORMATION' and the instance name is 'cpq-abc'. The 'General' section is expanded, showing the following fields:

Name *	cpq-abc
Site Domain *	https://cpq-000.us.oracle.com
Process Name *	abccpqo
Commerce Process ID	1835122
Document ID	18351223
Open Action ID	18353642
Use Unified UI *	True

4. Populate the following settings:
 - o **Name:** A descriptive name for the CPQ site to which the settings apply.
 - o **Site Domain:** The root URL of the CPQ site to which the administrator is connecting. For example: [https://\[yoursite\].oracle.com](https://[yoursite].oracle.com)
 - o **Process Name:** The variable name of the Commerce process that launches when creating a quote.
 - o **Commerce Process ID:** The unique ID of the Commerce process that launches when creating a quote.
 - o **Document ID:** The unique ID for the Main Document in the Commerce process.
 - o **Open Action ID:** The unique ID of the Open action used when editing a quote.
 - o **Use Unified UI:** A Boolean which tells the application which Dynamics user interface you are integrating with. Set this to TRUE if you are using the newer Unified Interface, set it to FALSE if you are using the legacy web client.

5. Click **Save**.

Notes:

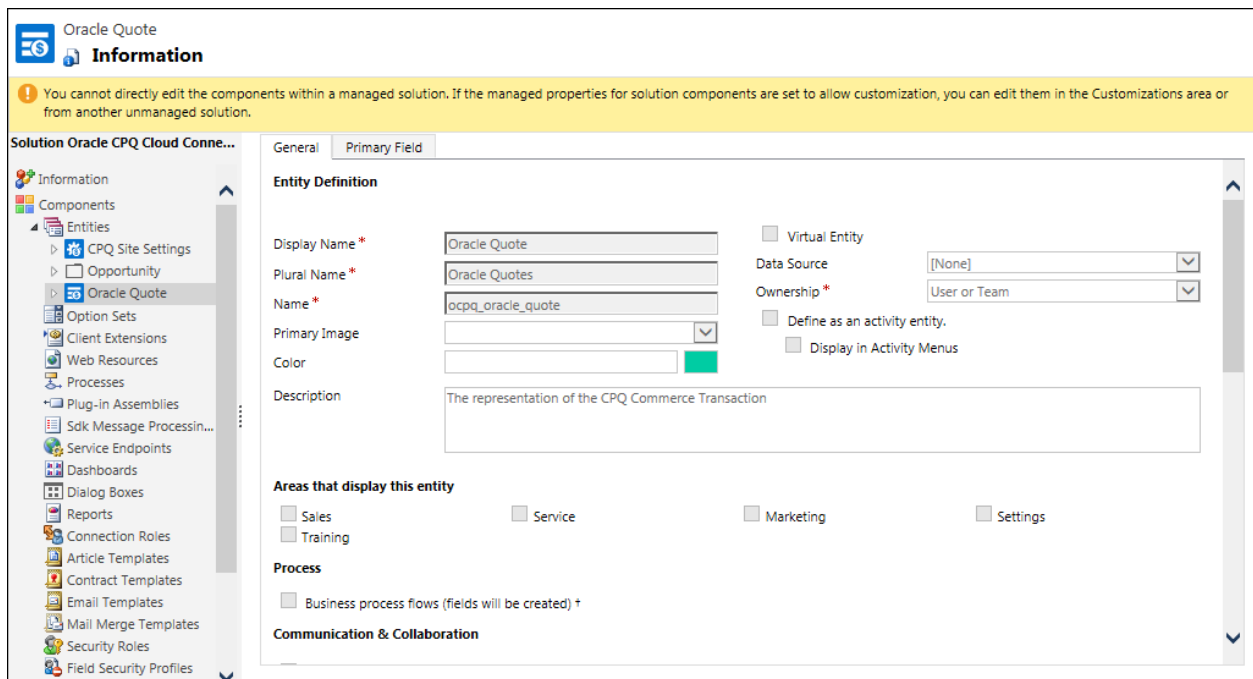
- When entering the Site Domain do not enter any trailing slashes or include a path, doing so will cause errors.
- If you are upgrading from an earlier version of the Oracle CPQ Connector for Dynamics (v0.3 or prior) you may see blank values for the Commerce Process, Document ID and Open Action ID after upgrade. This is because new fields with a different data type were added in v1.0. The integration will continue to work as the old values have been retained, but we recommend re-populating these values after upgrade.

CREATE BUSINESS RULE TO SET THE CPQ SITE ON NEW ORACLE QUOTES

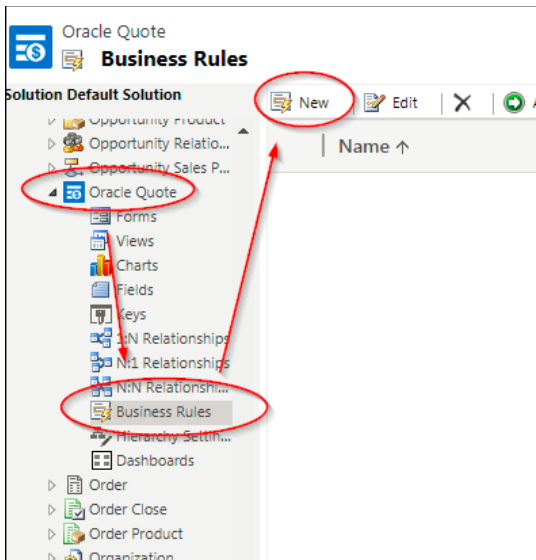
Each time a new quote is created, it must be assigned the Oracle CPQ Site Settings that were created in the previous step. This is important because the managed solution will use this value to look up the integration details when punching into CPQ. This is done by creating a Business Rule which automatically sets a default value for the CPQ Site field.

Complete the following steps:

1. Open Dynamics 365.
2. From the Navigation bar, go to **Settings > Solutions**.
3. From the **All Solutions** page, select **Oracle CPQ Connector** for Dynamics 365.
4. From the list of components, select the **Oracle Quote** entity.

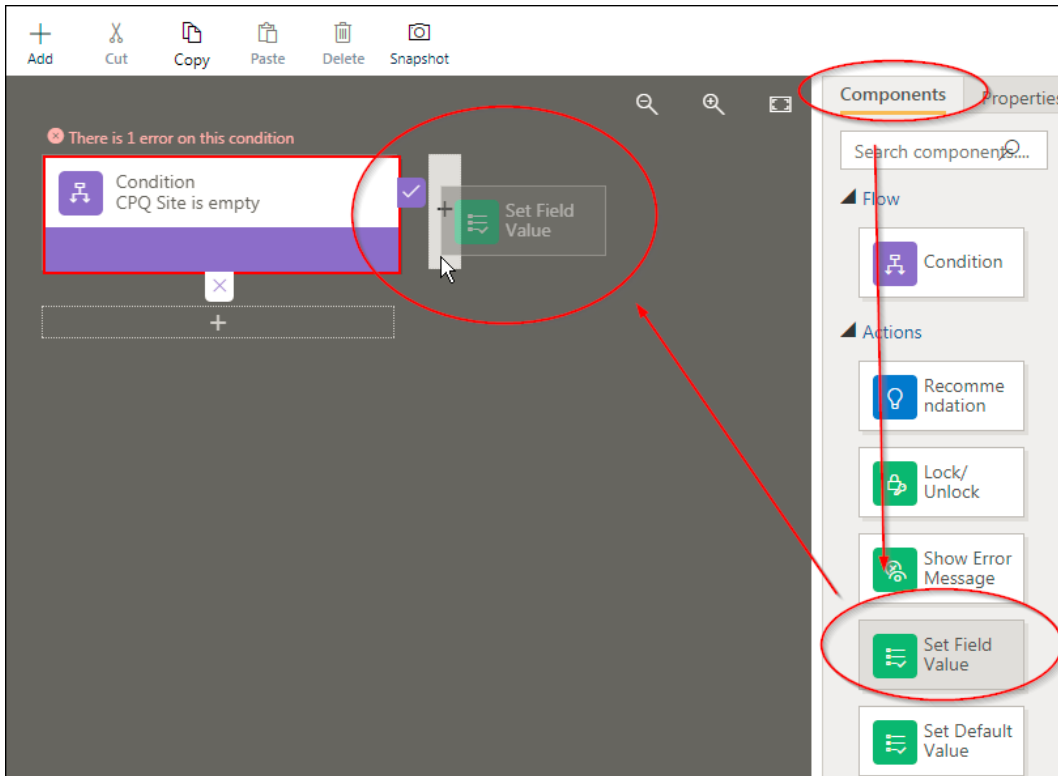


5. Under **Business Rules**, select **New**.

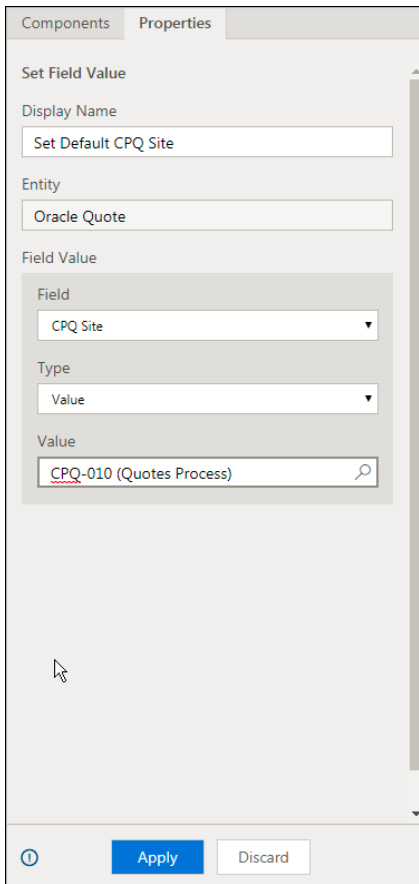


6. Populate the condition's properties, as follows:
 - In the **Display Name** field, enter a display name for the business rule.
 - In the **Entity** field, enter **Oracle Quote**.
 - From the **Source** drop-down, select **Entity**.
 - From the **Field** drop-down, select **CPQ Site**.
 - From the **Operator** drop-down, select **Does not contain data**.
 - The **Condition Expression** text box auto-populates based on your entries.

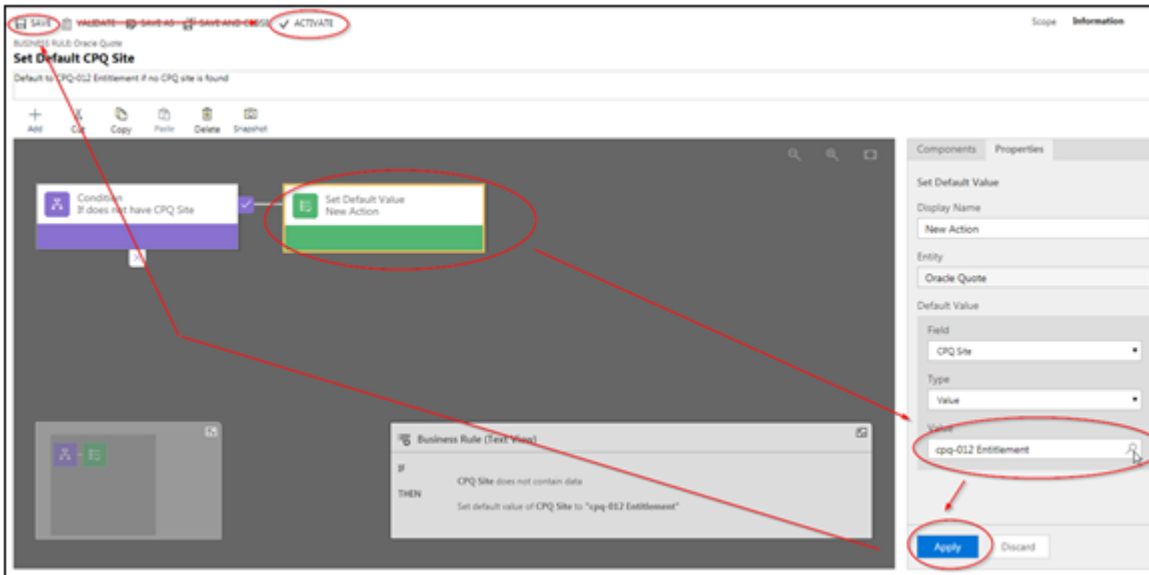
7. Click **Apply**.
8. Open the **Components** tab.
9. Drag the **Set Field Value** component to the condition's window.



10. Populate the properties for the action, as follows:
 - **Display Name:** Set Default CPQ site
 - **Entity:** Oracle Quote
 - **Field:** CPQ Site
 - **Type:** Value
 - **Value:** Search for a pre-existing Oracle CPQ site



11. Click **Apply**.
12. Click **Save**.
13. Click **Activate**.



EDIT BUSINESS RULE TO SET THE CPQ SITE ON NEW ORACLE QUOTES

If at any point you need to modify this business rule to change the default site settings you can do so by deactivating the rules and editing it.

Optionally, you can edit the business rule by completing the following steps:

1. Open Dynamics 365.
2. From the Navigation bar, go to **Settings > Solutions**.
3. From the **All Solutions** page, select **Oracle CPQ Connector** for Dynamics 365.
4. From the list of components, select the **Oracle Quote** entity.
5. Navigate to **Business Rules** and open the target process.
6. Deactivate the process to make it editable.
7. Click **Set Default Value**.
8. Click **Value** to search for a different CPQ Site Settings record.
9. Click **Apply**.
10. Click **Save**.
11. Click **Activate**.

Configure Data Synchronization

Administrators must configure Oracle CPQ to connect to their Dynamics 365 instance and to push and pull data from the correct entities and fields. The Microsoft Dynamics Integration migration package that you previously imported into your CPQ site contains a number of attributes, actions, functions and tables which support this process. When properly configured, these components transfer data between the systems when users create or update quotes in Dynamics 365 or mark a quote as primary and synchronize its data to the Opportunity.

Note: For information about the components included in the Microsoft Dynamics Integration migration package, refer to [Appendix A: Migration Package Components](#).

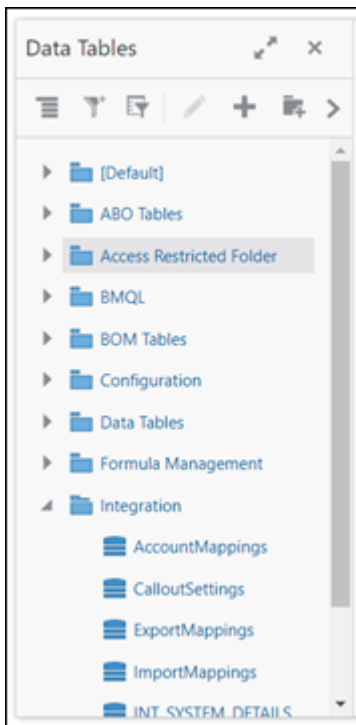
CONFIGURE CALLOUT SETTINGS AND FIELD MAPPINGS

The first step in setting up the data synchronization between the two systems is to populate the Callout Settings, Account Mappings, Import Mappings and Export Mappings tables that are part of the migration package. These tables are an analog to the CPQ Site Settings page in Dynamics and allow you to record the entity names and attributes that you will be integrating with.

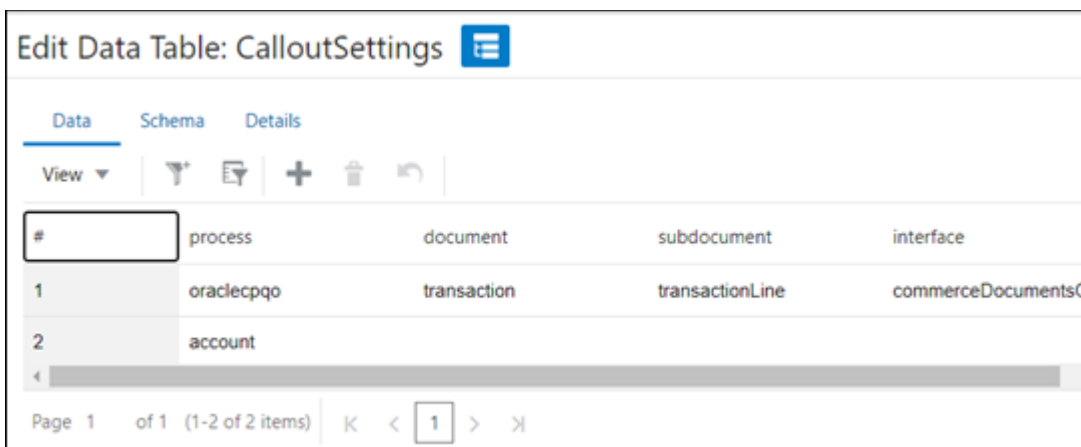
Complete the following steps to view or modify the data tables:

1. Open the Admin Home page.
2. Under **Developer Tools**, click **Data Tables**.

- Expand the **Integration** folder.



- Double click on the **CalloutSettings** table.



- The table should have two rows, one for defining the quote integration and one of defining the account integration. Populate the table cells according to the following table.

COLUMN NAME	DESCRIPTION
process	Specifies the varname of the process that is being integrated. <ul style="list-style-type: none"> For the quotes integration this value should be the varname of your commerce process. In the base RefApp it will typically be <code>oraclecpqo</code> For the accounts integration this value should be <code>account</code>
document	Specifies the varname of the quote header in CPQ. <ul style="list-style-type: none"> For the quotes integration this value should be the varname of your main document. In the base RefApp it will typically be <code>transaction</code> For the accounts integration this value should be blank

COLUMN NAME	DESCRIPTION
subdocument	<p>Specifies the varname of the quote line in CPQ.</p> <ul style="list-style-type: none"> For the quotes integration this value should be the varname of your sub-document. In the base RefApp it will typically be <code>transactionLine</code> For the accounts integration this value should be blank
interface	<p>Specifies the commerce process' REST endpoint in CPQ.</p> <ul style="list-style-type: none"> For the quotes integration this value can be found under Interface Catalogs. In the base RefApp it will typically be <code>commerceDocumentsOraclecpqoTransaction</code> For the accounts integration this value should be blank
dynamicsURL	<p>Specifies the REST endpoint for your Dynamics instance.</p> <ul style="list-style-type: none"> For both the quotes and accounts integrations this value will typically be in the format: <code>https://<resource URI>/api/data/v8.2</code>
parentEntity	<p>Specifies the entity schema name of the Oracle Quote's parent in Dynamics.</p> <ul style="list-style-type: none"> For the quotes integration this value should be <code>opportunities</code> For the accounts integration this value should be <code>accounts</code>
entity	<p>Specifies the entity schema name of the Oracle Quote in Dynamics.</p> <ul style="list-style-type: none"> For the quotes integration this value should be <code>ocpq_oracle_quotes</code> For the accounts integration this value should be blank
childEntity	<p>Specifies the entity schema name of the Oracle Quote's children in Dynamics.</p> <ul style="list-style-type: none"> For the quotes integration this value should be <code>opportunityproducts</code> For the accounts integration this value should be <code>contacts</code>

Note: We recommend using v8.2 of the API when setting the DynamicsURL as this is what the provided solution has been certified with. Changing to a newer version could result in a change in behavior and may require a refactoring of the provided BML integrations.

6. Click **Save** and **Deploy**.

7. Next, you will update the **Export Mappings** to map which fields from Oracle CPQ are to be pushed to which fields in Dynamics when saving a quote and synchronizing opportunity products. Double click on the **ExportMappings** table.

#	entity	field	fieldsReference	document	attribute	process
1	ocpq_oracle_quotes	ocpq_oracle_quoteid	false	transaction	mSDYNQuoteId_t	oraclecpqo
2	ocpq_oracle_quotes	ocpq_transaction_id	false	transaction	bs_id	oraclecpqo
3	ocpq_oracle_quotes	ocpq_name	false	transaction	transactionName_t	oraclecpqo
4	opportunities	ocpq_Opportunity_id	true	transaction	mSDYNOpportunityId_t	oraclecpqo
5	opportunityproducts	opportunityproductid	false	transactionLine	mSDYNOpportunityLineId_	oraclecpqo
6	opportunityproducts	quantity	false	transactionLine	_price_quantity	oraclecpqo
7	opportunityproducts	description	false	transactionLine	_part_desc	oraclecpqo
8	opportunityproducts	lineitemnumber	false	transactionLine	_sequence_number	oraclecpqo

8. This table will contain several rows by default, you need to update them to align the values to your site's implementation and to add additional rows for any additional fields you want to push to Dynamics. Populate the table cells according to the following table.

COLUMN NAME	DESCRIPTION
entity	<p>The name of the Dynamics entity containing the field to be updated. By default, there are three entities which will be mapped.</p> <ul style="list-style-type: none"> ocpq_oracle_quotes – this is the Oracle Quote entity that is provided with the solution. Each main document field that will be updated on the quote in Dynamics will have a row that contains this value in the entity column. opportunities – this is the Opportunity entity. Each main document field that will be updated on the parent opportunity will have a row that contains this value in the entity column. opportunityproducts – this is the Opportunity Product entity. Each sub- document field that will be updated on the opportunity products will have a row that contains this value in the entity column.
field	<p>The schema name of the field on the specified Dynamics entity. Several of the default fields will be included, but you must validate these values with your environment. Additionally, you must ensure that all required fields are included.</p>
fieldsReference	<p>Indicates if the mapped field is a Lookup type field on the specified entity. If it is a Lookup, it should be set to TRUE. Otherwise it will be set to FALSE.</p>

COLUMN NAME	DESCRIPTION
document	<p>The name of the CPQ document which contains the attribute which is being exported to Dynamics. There are two documents which will be mapped.</p> <ul style="list-style-type: none"> • Main document – the main document varname in your CPQ site. In the base RefApp it will typically be transaction. Each attribute that will be exported to the opportunity or quote in Dynamics will have a row that contains this value in the document column. • Sub-document – the sub-document varname in your CPQ site. In the base RefApp it will typically be transactionLine. Each attribute that will be exported to the opportunity product in Dynamics will have a row that contains this value in the document column.
attribute	<p>The varname of the attribute on the specified document in CPQ. Several of the default attributes will be included, but you must validate these values with your site.</p>
process	<p>The varname of the process that contains the attributes being mapped. In the base RefApp it will typically be oraclecpqo.</p>
isExternalID	<p>Indicates if the mapped field is a Primary Key on the specified entity. If it is a Primary Key, it should be set to TRUE. Otherwise it will be blank. All entities must have exactly one row flagged as TRUE.</p>
dataType	<p>Specifies the data type of the entity field being updated in Dynamics. Supported values are:</p> <ul style="list-style-type: none"> • (blank) – Text field and Multiple Lines of Text • float - Floating Point Number and Decimal Number • currency - Currency • date – Date and Time • datetime – Date and Time • integer - Whole Number • menusingle - Option Set • menumulti - Multi-Select Option Set • boolean - Two Options <p>Note: When integrating multi-select menus the variable name of the entry in Oracle CPQ needs to match the entry in Dynamics.</p>

9. **Save and Deploy.**

10. Next, you will update the **Import Mappings** to map which fields from Dynamics are to be fetched and saved to the quote fields in CPQ as part of the Import Opportunity and Import Quote integrations. Double click on the **ImportMappings** table.

11. This table will contain a few rows by default, you need to update them to align the values to your site's implementation and to add additional rows for any additional fields you want to fetch from Dynamics. Populate the table cells according to the following table.

COLUMN NAME	DESCRIPTION
entity	<p>The name of the Dynamics entity containing the field to be updated. By default, there are three entities which will be mapped.</p> <ul style="list-style-type: none"> • <code>ocpq_oracle_quotes</code> – this is the Oracle Quote entity that is provided with the solution. Each oracle quote field that will be fetched and saved to the main document will have a row that contains this value in the entity column. • <code>opportunities</code> – this is the Opportunity entity. Each opportunity field that will be fetched and saved to the main document will have a row that contains this value in the entity column. • <code>opportunityproducts</code> – this is the Opportunity Product entity. Each opportunity product field that will be fetched and saved to the sub-document will have a row that contains this value in the entity column.
field	<p>The schema name of the field on the specified Dynamics entity. A few of the default fields will be included, but you must validate these values with your environment.</p>
fieldsReference	<p>Indicates if the mapped field is a Lookup type field on the specified entity. If it is a Lookup, it should be set to TRUE. Otherwise it will be set to FALSE.</p>
document	<p>The name of the CPQ document which contains the attribute which is being imported from Dynamics. There are two documents which will be mapped.</p> <ul style="list-style-type: none"> • Main document – the main document varname in your CPQ site. In the base RefApp it will typically be <code>transaction</code>. Each attribute that will be imported from the opportunity or quote in Dynamics will have a row that contains this value in the document column. • Sub-document – the sub-document varname in your CPQ site. In the base RefApp it will typically be <code>transactionLine</code>. Each attribute that will be imported from the opportunity product in Dynamics will have a row that contains this value in the document column.
attribute	<p>The varname of the attribute on the specified document in CPQ. A few default attributes will be included, but you must validate these values with your site.</p>
process	<p>The varname of the process that contains the attributes being mapped. In the base RefApp it will typically be <code>oraclecpqo</code>.</p>

COLUMN NAME	DESCRIPTION
dataType	<p>Specifies the data type of the entity field being retrieved in Dynamics. Supported values are:</p> <ul style="list-style-type: none"> (blank) – Text field and Multiple Lines of Text float - Floating Point Number and Decimal Number currency - Currency date – Date and Time datetime – Date and Time integer - Whole Number menusingle - Option Set menumulti - Multi-Select Option Set boolean - Two Options <p>Note: When integrating multi-select menus the variable name of the entry in CPQ needs to match the entry in Dynamics.</p>

Note: In most cases you must map the Opportunity ID and the Opportunity Product IDs for Import to ensure that duplicates are not created when a subsequent Export integration is run. These mappings are usually included by default.

12. **Save and Deploy.**

13. Next, you will update the **Account Mappings** to map which fields from Dynamics are to be fetched and assigned to the Account attributes in CPQ as part of the Autofill and Select Alternate Address actions. Double click on the **AccountMappings** table.

14. This table will contain a few rows by default, you need to update them to align the values to your site's implementation and to add additional rows for any additional fields you want to fetch from Dynamics. Populate the table cells according to the following table.

COLUMN NAME	DESCRIPTION
integration	<p>This specifies which of the integrations will use the mapping. There are two actions supported and each has an associated integration.</p> <ul style="list-style-type: none"> Autofill – this value is the parameter specified in the Account Integration BML associated to the Account Autofill action. This BML is defined in the Create Account BML Integrations section of this document. Select Alternate Address – this value will be the parameter specified in the Address Integration BML associated to the Select Alternate Address action. This BML is defined in the Create Account BML Integrations section of this document.
source	<p>The schema name of the field on the Dynamics Account or Contact. A few of Several the default fields will be included, but you must validate these values with your environment.</p>
destination	<p>The varname of the attribute on the CPQ Account or Address object. Several default fields will be included, but you must validate these values with your environment.</p>

Note: The destination attributes in the above table reflect the Account and Address fields on the Accounts object in CPQ, they do not represent the associated Quote fields. You must map the Account fields to the Quote fields using the Mapping tab on the Autofill and Select Alternate Address actions.

15. **Save and Deploy.**

SET THE OPPORTUNITY ID ATTRIBUTE

When punching into CPQ from an Opportunity the Opportunity ID is passed into the quote. Administrators must set which Main Document attribute that this ID will be saved to, this is done by setting Opportunity ID to mSDYNOpportunityId_t attribute on the Main Document definition.

Complete the following steps to set the Opportunity ID attribute:

1. Log in to Oracle CPQ as an administrator.
2. Under **Commerce and Documents**, click **Process Definition**. The **Processes** page opens.
3. Locate the name of your Commerce process.
4. From the associated **Navigation** menu, select **Documents**. Click **List**. The **Document List** page opens.
5. From the **Document Name** column, click on the main document link. In the base Ref App this is typically labeled **Transaction**.
6. Locate the field **Opportunity ID Mapping** and set the value to `<main document varname>.<opportunity ID attribute varname>`. If you are using the fields that were included in the Dynamics Integration migration package and was installed into a base Ref App this value will be `transaction.mSDYNOpportunityId_t`.
7. Click **Apply**.

CREATE COMMERCE BML INTEGRATIONS

The Dynamics Integration migration package includes a set of Commerce Actions, Attribute and Commerce Library, and BML Library Functions. However, administrators must manually define a set of BML Integrations which will link these elements together and execute the data imports and exports when the specified actions are triggered.

To create the Import Quote Data Integration, follow these steps:

1. Open the Admin Home page.
2. Select **Process Definition** under Commerce and Documents. The **Processes** page opens.
3. From the **Navigation** menu next to the target process, select **Integrations**. Click **List**. The **Integrations** page opens.
4. Click **Add**. The **Select Integration Types** page opens.
5. Select the **BML** option.

Select	Type
<input type="radio"/>	Export (SOAP Generator)
<input type="radio"/>	Import (Query Generator and Result Parser)
<input type="radio"/>	Integration Cloud Service
<input checked="" type="radio"/>	BML

6. Click **Next**. The **Edit Integration** page opens.

*Name:

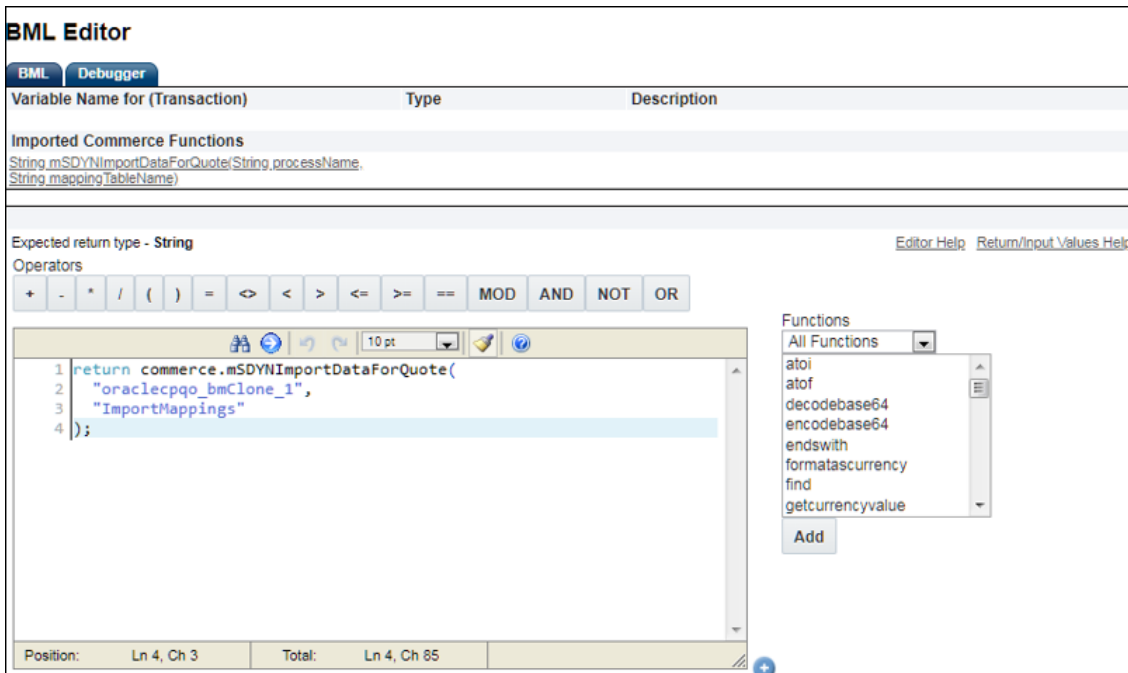
*Variable Name:

Description:

*Integration Type: BML

BML Function

7. In the **Name** field enter a name for the BML integration, in this case Import Quote Data.
8. The **Variable Name** field auto-populates upon clicking in or tabbing to the field.
9. (Optional) In the **Description** field, provide a description of the integration.
10. For **Integration Type** select **Requires Partner Session**.
11. Click **Define**. The **Select Attributes** page opens.
12. Under the Library Functions tab select **mSDYNImportDataForQuote**.
13. Click **Next**. The BML Editor opens.



14. Enter the following BML, replacing the commerceProcessName with the varname of your process.

```
return commerce.mSDYNExportDataForQuote(
    "commerceProcessName",
    "ImportMappings",
);
```

15. Click **Save and Close**.

To create the Export Quote Data Integration, perform the following steps:

1. Open the Admin Home page.
2. Select **Process Definition** under Commerce and Documents. The **Processes** page opens.
3. From the **Navigation** menu next to the target process, select **Integrations**. Click **List**. The **Integrations** page opens.
4. Click **Add**. The **Select Integration Types** page opens.

- Select the **BML** option.

Select Integration Types Process : Quotes

Select	Type
<input type="radio"/>	Export (SOAP Generator)
<input type="radio"/>	Import (Query Generator and Result Parser)
<input type="radio"/>	Integration Cloud Service
<input checked="" type="radio"/>	BML

[Back to Top](#)

- Click **Next**. The **Edit Integration** page opens.

Edit Integration Process : Quotes

Integration Information

*Name:

*Variable Name:

Description:

*Integration Type: BML

BML Function

[Back to Top](#)

- In the **Name** field enter a name for the BML integration, in this case Export Quote Data.
- The **Variable Name** field auto-populates upon clicking in or tabbing to the field.
- (Optional) In the **Description** field, provide a description of the integration.
- For **Integration Type** select **Requires Partner Session**.
- Click **Define**. The **Select Attributes** page opens.
- Under the Library Functions tab select **mSDYNExportDataForQuote** and **mSDYNCollectQuoteFields**
- Click **Next**. The BML Editor opens.

BML Editor

BML **Debugger**

Variable Name for (Transaction)	Type	Description
Imported Commerce Functions		
String mSDYNExportDataForQuote(String processName, String mappingTableName, Json data)		
Json mSDYNCollectQuoteFields()		

Expected return type - String [Editor Help](#) [Return/Input Values Help](#)

Operators: +, -, *, /, {, }, =, <, >, <=, >=, ==, MOD, AND, NOT, OR

```

1 return commerce.mSDYNExportDataForQuote(
2   "oraclecpqo_bmClone_1",
3   "ExportMappings",
4   commerce.mSDYNCollectQuoteFields()
5 );

```

Functions: All Functions, atoi, atof, decodebase64, encodebase64, endswith, formatascurrency, find, getcurrencyvalue, Add

14. Enter the following BML, replacing the commerceProcessName with the varname of your process.

```
return commerce.mSDYNEExportDataForQuote(  
    "commerceProcessName",  
    "ExportMappings",  
    commerce.mSDYNCollectQuoteFields()  
);
```

15. Click **Save** and **Close**.

To create the Export Quote Line Data Integration, follow these steps:

1. Open the Admin Home page.
2. Select **Process Definition** under Commerce and Documents. The **Processes** page opens.
3. From the **Navigation** menu next to the target process, select **Integrations**. Click **List**. The **Integrations** page opens.
4. Click **Add**. The **Select Integration Types** page opens.
5. Select the **BML** option.

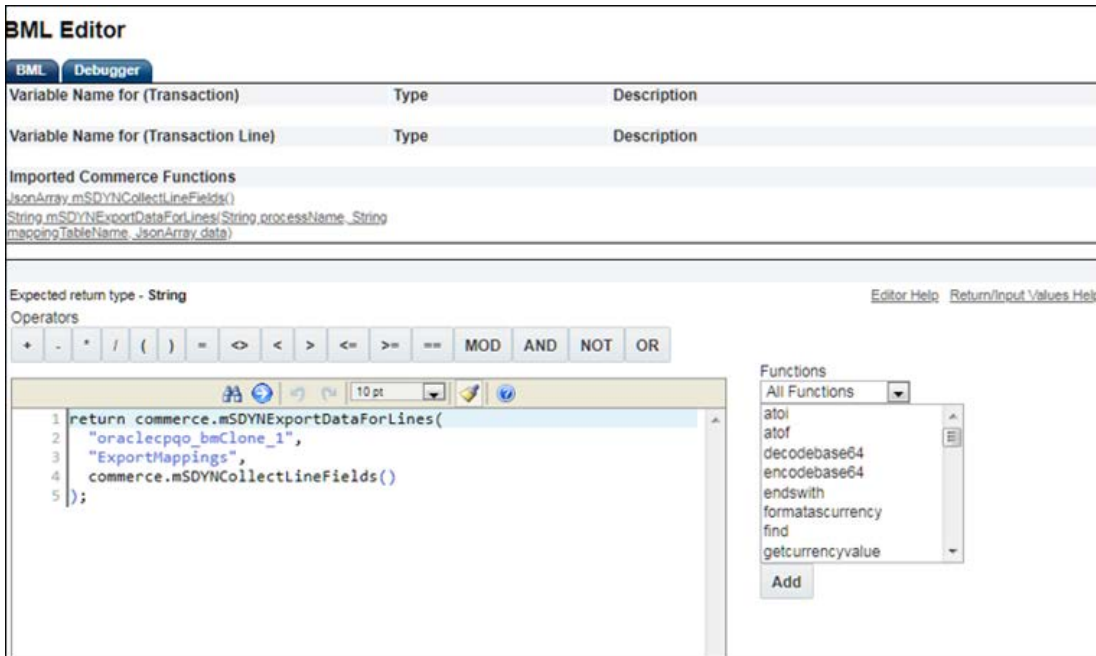
Select	Type
<input type="radio"/>	Export (SOAP Generator)
<input type="radio"/>	Import (Query Generator and Result Parser)
<input type="radio"/>	Integration Cloud Service
<input checked="" type="radio"/>	BML

6. Click **Next**. The **Edit Integration** page opens.

*Name:
*Variable Name:
Description:
*Integration Type: BML
BML Function

7. In the **Name** field enter a name for the BML integration, in this case Export Quote Line Data.
8. The **Variable Name** field auto-populates upon clicking in or tabbing to the field.
9. (Optional) In the **Description** field, provide a description of the integration.
10. For **Integration Type** select **Requires Partner Session**.
11. Click **Define**. The **Select Attributes** page opens.
12. Under the Library Functions tab select **mSDYNEExportDataForLines** and **mSDYNCollectLineFields**

13. Click **Next**. The BML Editor opens.



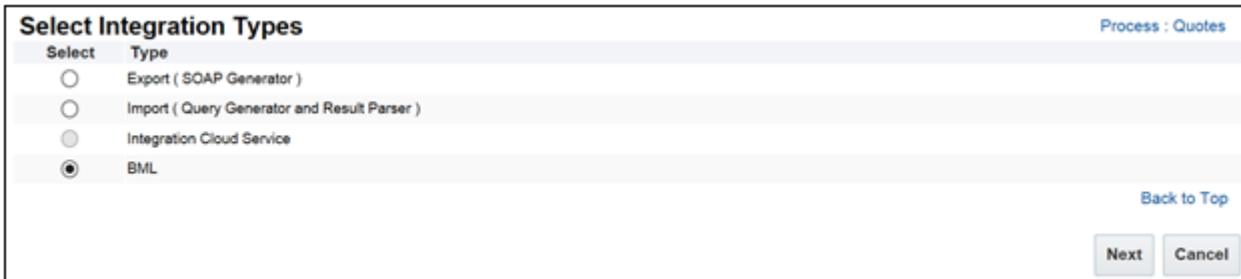
14. Enter the following BML, replacing the commerceProcessName with the varname of your process.

```
return commerce.mSDYNExportDataForLines(
    "commerceProcessName",
    "ExportMappings",
    commerce.mSDYNCollectLineFields()
);
```

15. Click **Save** and **Close**.

To create the Upsert Primary Quote Info Integration, follow these steps:

1. Open the Admin Home page.
2. Select **Process Definition** under Commerce and Documents. The **Processes** page opens.
3. From the **Navigation** menu next to the target process, select **Integrations**. Click **List**. The **Integrations** page opens.
4. Click **Add**. The **Select Integration Types** page opens.
5. Select the **BML** option



- Click **Next**. The **Edit Integration** page opens.

- In the **Name** field enter a name for the BML integration, in this case Upsert Primary Quote Info.
- The **Variable Name** field auto-populates upon clicking in or tabbing to the field.
- (Optional) In the **Description** field, provide a description of the integration.
- For **Integration Type** select **Requires Partner Session**.
- Click **Define**. The **Select Attributes** page opens.
- Under the Library Functions tab select **mSDYNUpsertPrimaryFlag**.
- Click **Next**. The BML Editor opens.

- Enter the following BML, replacing the `commerceProcessName` with the `varname` of your process.

```
return commerce.mSDYNUpsertPrimaryFlag("commerceProcessName");
```

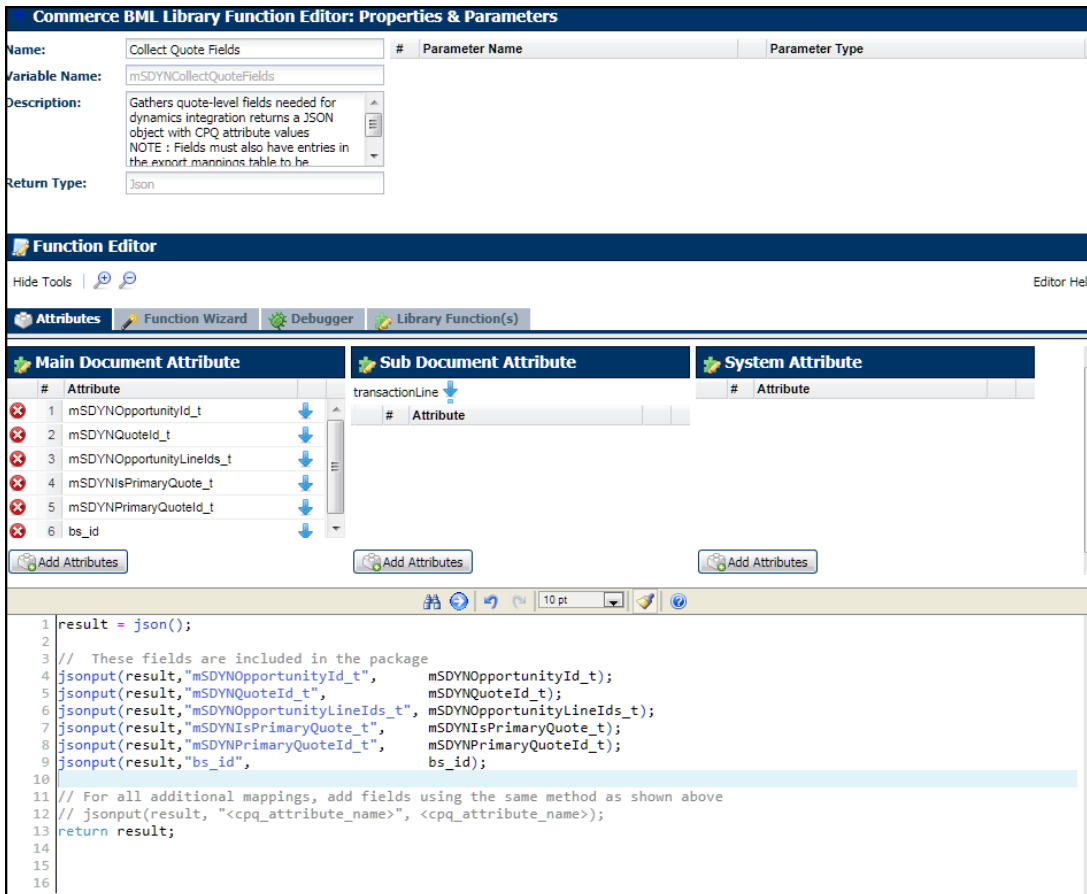
- Click **Save** and **Close**.

MODIFY THE COLLECT QUOTE FIELDS COMMERCE LIBRARY FUNCTION

One of the Commerce Library functions that is provided as part of the Dynamics Integration migration package is called Collect Quote Fields. The function uses the Export Mappings data table to construct payload for the outbound web service call to Dynamics. In order for this function to successfully build the payload the function must take the Commerce Attributes which have been mapped as inputs.

Follow the steps below to modify the Collect Quote Fields Commerce Library Function to support the Export Quote Data integration:

1. Open the Admin Home page.
2. Select **Process Definition** under Commerce and Documents. The **Processes** page opens.
3. From the **Navigation** menu next to the target process, select **Documents**. Click **List**. The **Document List** page opens.
4. From the **Navigation** menu next to the main document, select **Library Functions**. Click **List**. The **Commerce BML Library Functions List** page opens.
5. Click on the **Collect Quote Fields** function. The BML Editor opens.
6. Click **Add Attributes** and select the attributes which have been populated in the **Export Mappings Data Table** in the previous section.
7. Modify the BML function to add those new fields to the JSON using the syntax shown.



Commerce BML Library Function Editor: Properties & Parameters

Name: Collect Quote Fields # Parameter Name Parameter Type

Variable Name: mSDYNCollectQuoteFields

Description: Gathers quote-level fields needed for dynamics integration returns a JSON object with CPQ attribute values
NOTE : Fields must also have entries in the export_mappings table to be

Return Type: json

Function Editor

Hide Tools | Editor Help

Attributes Function Wizard Debugger Library Function(s)

Main Document Attribute		Sub Document Attribute	System Attribute
#	Attribute	#	Attribute
1	mSDYNOpportunityId_t	transactionLine	
2	mSDYNQuoteId_t	#	Attribute
3	mSDYNOpportunityLineIds_t		
4	mSDYNIsPrimaryQuote_t		
5	mSDYNPrimaryQuoteId_t		
6	bs_id		

```
1 result = json();
2
3 // These fields are included in the package
4 jsonput(result,"mSDYNOpportunityId_t", mSDYNOpportunityId_t);
5 jsonput(result,"mSDYNQuoteId_t", mSDYNQuoteId_t);
6 jsonput(result,"mSDYNOpportunityLineIds_t", mSDYNOpportunityLineIds_t);
7 jsonput(result,"mSDYNIsPrimaryQuote_t", mSDYNIsPrimaryQuote_t);
8 jsonput(result,"mSDYNPrimaryQuoteId_t", mSDYNPrimaryQuoteId_t);
9 jsonput(result,"bs_id", bs_id);
10
11 // For all additional mappings, add fields using the same method as shown above
12 // jsonput(result, "<cpq_attribute_name>", <cpq_attribute_name>);
13 return result;
14
15
16
```

8. Click **Update**.

MODIFY THE COLLECT LINE FIELDS COMMERCE LIBRARY FUNCTION

Another of the Commerce Library functions that is provided as part of the Dynamics Integration migration package is called Collect Line Fields. The function uses the Export Mappings data table to construct payload for the outbound web service call to Dynamics. In order for this function to successfully build the payload the function must take the Commerce Attributes which have been mapped as inputs.

Follow the steps below to modify the Collect Line Fields Commerce Library Function to support the Export Quote Line Data integration:

1. Open the Admin Home page.
2. Select **Process Definition** under Commerce and Documents. The **Processes** page opens.
3. From the **Navigation** menu next to the target process, select **Documents**. Click **List**. The **Document List** page opens.
4. From the **Navigation** menu next to the main document, select **Library Functions**. Click **List**. The **Commerce BML Library Functions List** page opens.
5. Click on the **Collect Line Fields** function. The BML Editor opens.
6. Click **Add Attributes** and select the attributes which have been populated in the **Export Mappings Data Table** in the previous section.
7. Modify the BML function to add those new fields to the JSON using the syntax shown.

Commerce BML Library Function Editor: Properties & Parameters

Name: Collect Line Fields # Parameter Name
Variable Name: mSDYNCollectLineFields
Description: Gathers line-level fields needed for dynamics integration. Returns a JSON array of line items with attribute values. NOTE: Fields must also have entries in...
Return Type: JSONArray

Function Editor

Hide Tools | Editor Help

Attributes | Function Wizard | Debugger | Library Function(s)

Main Document Attribute		Sub Document Attribute		System Attribute	
#	Attribute	#	Attribute	#	Attribute
		1	_document_number		
		2	mSDYNOpportunityLineId_1		
		3	mSDYNOpportunityId_1		
		4	_price_quantity		
		5	part number		

```
1 result = jsonarray("");
2
3 // Loop over each line item, and package it into a json object
4 for line in transactionLine {
5   thisline = json();
6   // These fields are included in the package
7   jsonput(thisline, "_document_number", line._document_number);
8   jsonput(thisline, "mSDYNOpportunityLineId_1", line.mSDYNOpportunityLineId_1);
9   jsonput(thisline, "mSDYNOpportunityId_1", line.mSDYNOpportunityId_1);
10  jsonput(thisline, "_price_quantity", line._price_quantity);
11  jsonput(thisline, "_part_number", line._part_number);
12  jsonput(thisline, "_part_desc", line._part_desc);
13  jsonput(thisline, "_sequence_number", line._sequence_number);
14
15  // For all additional mappings, add fields using the same method as shown above
16  // jsonput(thisline, "<cpq_attribute_name>", line.<cpq_attribute_name>);
17
18  // Append the line item js object
19  jsonarrayappend(result, thisline);
20 }
21 return result;
```

8. Click **Update**.

CREATE ACCOUNT BML INTEGRATIONS

Similar to the Commerce BML Integrations, if you wish to use the Account integration features administrators must manually define a pair of Account BML Integrations which will execute the data imports when the specified actions are triggered.

To create the Account Import Integration, follow these steps:

1. Open the Admin Home page.
2. Select **Accounts** under Integration Platform. The **Accounts** page opens.
3. Click **Integration**. The Integrations for CRM page opens.
4. Click **Add**. The **Edit Integration** page opens.

5. In the **Name** field enter a name for the BML integration, in this case Account Import.
6. The **Variable Name** field auto-populates upon clicking in or tabbing to the field.
7. (Optional) In the **Description** field, provide a description of the integration.
8. Click **Add**. The page will refresh.
9. Click **Define**. The **Select Attributes** page opens.
10. Under the System Variable Name tab select **_system_account_id_field**
11. Under the Library Functions tab select **mSDYNImportAsJson_util** and **getMSDYNCalloutSettingsDict_util**
12. Click **Next**. The BML Editor opens.

13. Enter the following BML.

```
// MSDYN Account Import (msdyn_import_account)
// used in the autofill actions
//-----
// PARAMETERS:
// * _system_account_id_field : String : dynamics partner entity account id
// RETURNS
// a JSON string that sets CPQ account fields
// UTILS NEEDED:
// _orcl_dyn365.getMSDYNCalloutSettingsDict_util
// _orcl_dyn365.mSDYNImportAsJson_util
//-----

// retrieve base url from the callout settings dictionary
settingsDict = util._orcl_dyn365.getMSDYNCalloutSettingsDict_util(
    "dynamicsURL,parentEntity",
    "account"
);
// @TODO add an "_" before customer_id to make this work in normal context
calloutUrl = get(settingsDict,"dynamicsURL") + "/" + get(settingsDict,"parentEntity") +
    "(" + _system_account_id_field + ")";

// use a util to make the call, manually add in the partner id field and return the
result
result = util._orcl_dyn365.mSDYNImportAsJson_util(calloutUrl, "AccountMappings",
    "Autofill");
jsonput(result, "customer_id", _system_account_id_field);
return jsontostr(result);
```

14. Click **Save and Close**.

Note: When calling the `orcl_dyn365.mSDYNImportAsJson_util` in the above function the third parameter will indicate which set of mappings from the AccountMappings table will be used. This must exactly match the value in the integration column of that table. See the [Configure Callout Settings and Field Mappings](#) section of this guide.

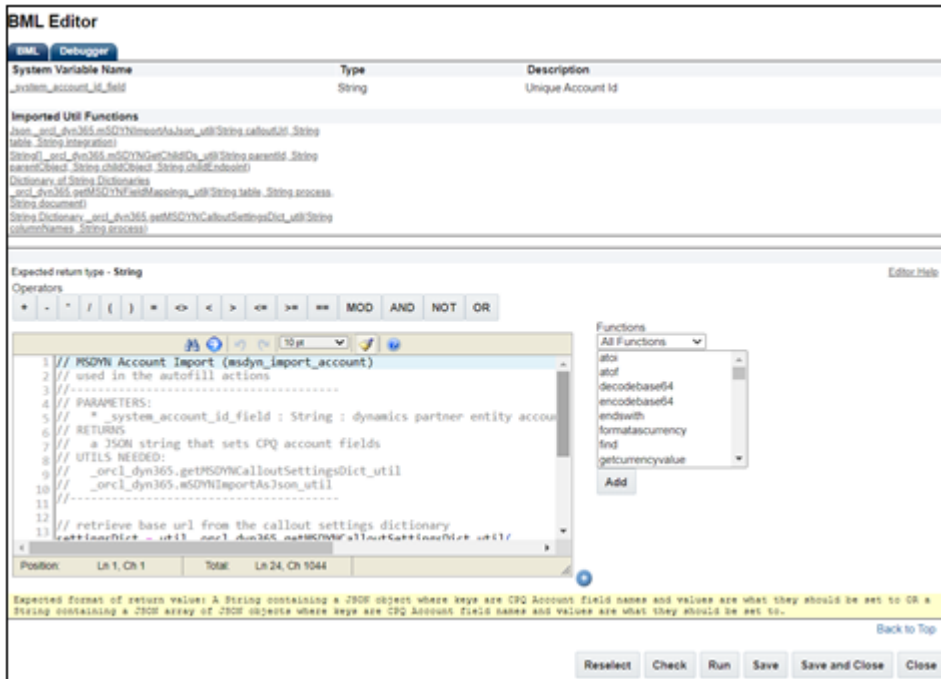
To create the Address Import Integration, follow these steps:

1. Open the Admin Home page.
2. Select **Accounts** under Integration Platform. The **Accounts** page opens.
3. Click **Integration**. The Integrations for CRM page opens.
4. Click **Add**. The **Edit Integration** page opens.

Edit Integration	
Integration Information	
*Name:	<input type="text"/>
*Variable Name:	<input type="text"/>
Description:	<input type="text"/>
*Integration Type:	BML
Endpoint URL	Dynamics365 https://login.microsoftonline.com

5. In the **Name** field enter a name for the BML integration, in this case Address Import.
6. The **Variable Name** field auto-populates upon clicking in or tabbing to the field.
7. (Optional) In the **Description** field, provide a description of the integration.

8. Click **Add**. The page will refresh.
9. Click **Define**. The **Select Attributes** page opens.
10. Under the System Variable Name tab select **_system_account_id_field**
11. Under the Library Functions tab select **mSDYNImportAsJson_util** and **getMSDYNCalloutSettingsDict_util**
12. Click **Next**. The BML Editor opens.



13. Enter the following BML.

```
// MSDYN Address Import (msdyn_import_address)
// used in the select contact / select address action
//-----
// PARAMETERS:
// * _system_account_id_field : String : dynamics partner entity account id
// RETURNS
// a JSON array string that sets CPQ address fields
// UTILS NEEDED:
// _orcl_dyn365.getMSDYNCalloutSettingsDict_util
// _orcl_dyn365.mSDYNImportAsJson_util
//-----

// retrieve base url from the callout settings dictionary
settingsDict = util._orcl_dyn365.getMSDYNCalloutSettingsDict_util(
    "dynamicsURL,childEntity",
    "account"
);
// @TODO add an "_" before customer_id to make this work in normal context
calloutUrl = get(settingsDict,"dynamicsURL") + "/" + get(settingsDict,"childEntity") +
"?$filter=_accountid_value%20eq%20" + _system_account_id_field;

// use a util to make the call
// the address list will be a key in the response
rawResult = util._orcl_dyn365.mSDYNImportAsJson_util(calloutUrl, "AccountMappings",
"Select Alternate Address");
resultArr = jsonset(rawResult, "array", "jsonarray");

// add a customer id to each element in the response
```

```

// to stop it from being cleared by the select address autofill
// (this can also be avoided by setting it to "leave unchanged" on the _customer_id
attribute
// but setting it here provides extra security and room for other fixed mappings)
resultSize = jsonarraysize(resultArr);
if (resultSize > 0){
  loopers = range(resultSize);
  for looper in loopers {
    thisElement = jsonarrayget(resultArr, looper, "json");
    jsonput(thisElement, "id", _system_account_id_field);
  }
}

return jsonarraytostr(resultArr);

```

Note: When calling the `orcl_dyn365.mSDYNImportAsJson_util` in the above function the third parameter will indicate which set of mappings from the AccountMappings table will be used. This must exactly match the value in the integration column of that table. See the [Configure Callout Settings and Field Mappings](#) section of this guide.

14. Click **Save** and **Close**.

SETUP THE NEW, OPEN, AND SAVE QUOTE ACTIONS

The Dynamics Integration migration package includes a few Commerce Actions which are added alongside the standard actions that are part of the Base Ref App. In order to trigger the Integrations which you defined in the previous section they need to be added to these actions.

To ensure that the Import Quote Data Integration runs when a new quote is created, complete the following steps:

1. Open the Admin Home page.
2. Under **Commerce and Documents**, select **Process Definition**. The **Processes** page opens.

Select	Name	Navigation	Quick Links	Description	Last Deployed
	Quotes	Documents	List Close	Main QA process. Contains basic functionality, integration setups, and various feature testsets.	06/25/2017 9:20 AM
	Partials	Documents	List Close	Secondary process dedicated to testing Formulas Management.	06/27/2017 12:41 PM
	Test	Documents	List Close	Clone to create your own test process.	06/27/2017 12:42 PM
	Create Quote to Order	Documents	List Close	The reference commerce process.	21/05/2016 7:10 AM
	Operational Test	Documents	List Close	Clone to create your own test process.	12/05/2017 7:23 AM
	Close	Documents	List Close	Clone to create your own test process.	02/12/2016 8:10 AM
	Advanced Integration	Documents	List Close	The reference commerce process.	02/12/2016 12:54 PM

3. Click the name of the target process. The **Process Administration** page opens.
4. Select the **Integration** tab.

5. Move the **Import Quote Data** integration from the **Available Imports** column to the **Selected Imports** column.
6. Click **Update**.

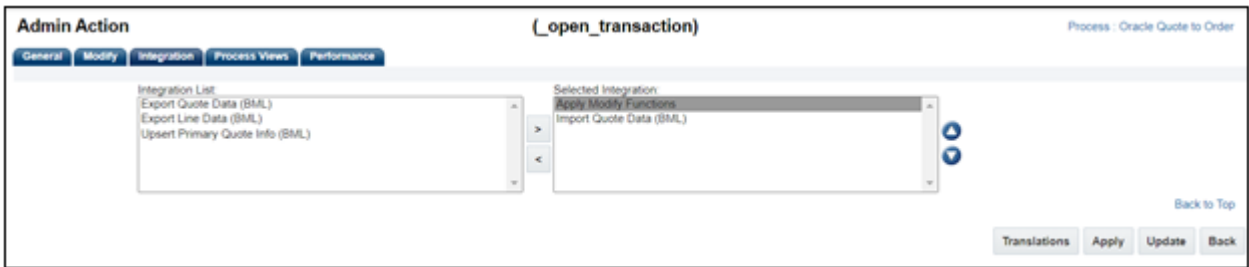
To ensure that the Import Quote Data Integration runs whenever a quote is opened, complete the following steps:

1. Open the Admin Home page.

2. Select **Process Definition** under Commerce and Documents. The **Processes** page opens.
3. From the **Navigation** menu next to the target process, select **Process Actions**. Click **List**. The **Process Action List** page opens.
4. Click on the **Open Transaction** Action. The `_open_transaction` page detail opens.



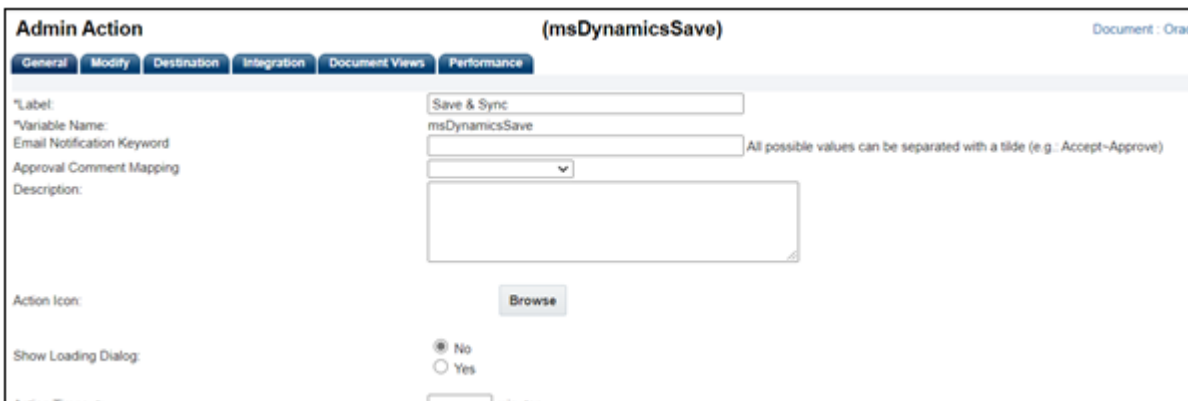
5. Select the **Integration** tab.
6. Move the **Import Quote Data** integration from the **Available Imports** column to the **Selected Imports** column. Ensure that the integration is listed below the Apply Modify Functions row so that it runs afterwards.



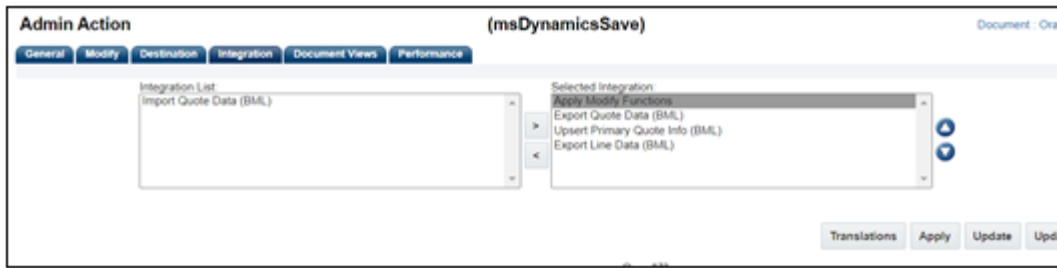
7. Click **Apply**.

To ensure that the Export Quote Data, Export Line Data, and Upsert Primary Quote Info Integrations all run whenever a quote is Saved and Synced, complete the following steps:

1. Open the Admin Home page.
2. Select **Process Definition** under Commerce and Documents. The **Processes** page opens.
3. From the **Navigation** menu next to the target process, select **Documents**. Click **List**. The **Document List** page opens.
4. From the **Navigation** menu next to the main document, select **Actions**. Click **List**. The **Actions List** page opens.
5. Click on the label for the **msDynamicsSave** action. The `msDynamicsSave` detail page opens.



6. Select the **Integration** tab.
7. Move the **Export Quote Data**, **Upsert Primary Quote Info** and **Export Line Data** integrations from the **Available Imports** column to the **Selected Imports** column. Ensure that the integrations are listed below the Apply Modify Functions row so that it runs afterwards.



8. Click **Apply**.

Notes:

- Any action that needs to synchronize data with Dynamics 365 must have the proper integration action created.
- Administrators cannot remove **Apply Modify Functions** from the **Selected Integration** list. They must order all BML integrations around **Apply Modify Functions**.
- Multiple actions can reference the same BML integration.
- When a BML integration references a process action, administrators cannot delete it.
- Non-BML integrations are not allowed when a BML integration is applied to a process action. Similarly, BML integrations are not allowed when a non-BML integration is applied to a process action. An error message will display stating that BML type integrations cannot be mixed with other integration types.

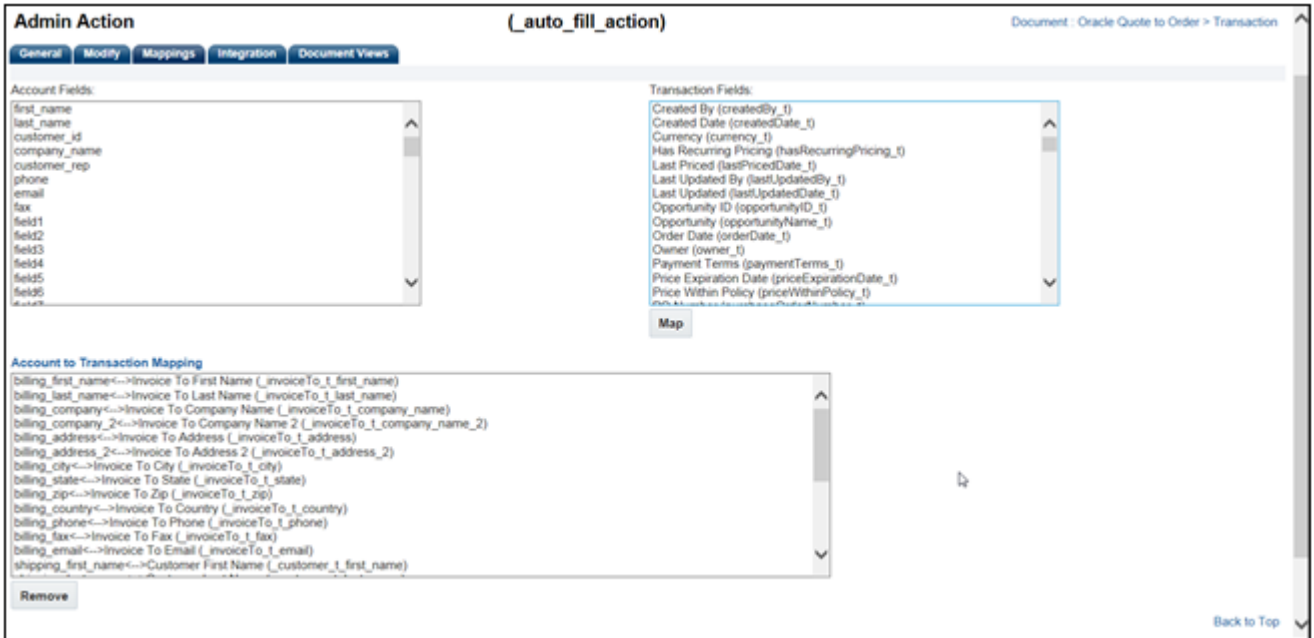
SETUP THE AUTOFILL AND SELECT ALTERNATE ADDRESS ACTIONS

The integration supports the automatic import of Account information using the Autofill action and the selection of alternate contact and address info using the Select Alternate Address action. In order to trigger the Integrations that you defined in the earlier section they need to be added to these actions and the mappings on those actions must be defined.

To add the Account integration to the **Autofill** process action, perform the following steps:

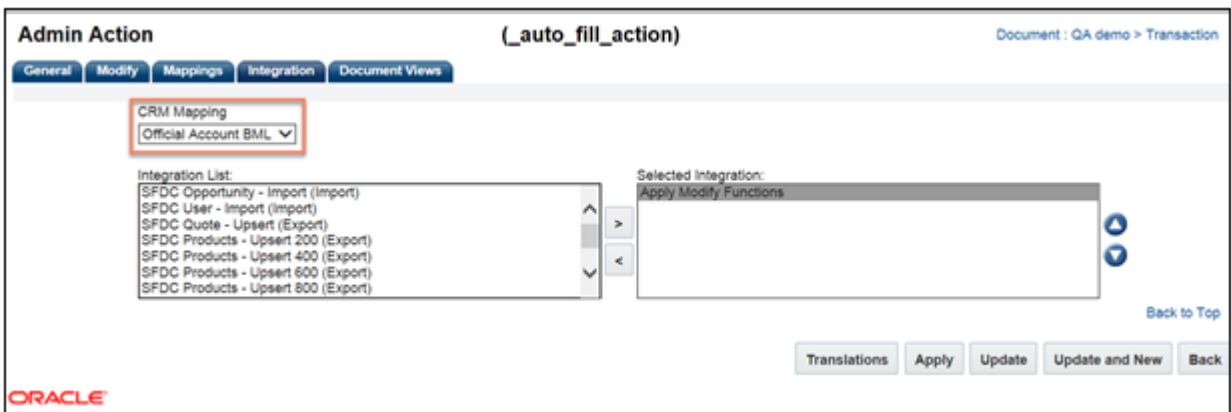
1. Open the Admin Home page.
2. Select **Process Definition** under **Commerce and Documents**. The **Processes** page opens.
3. Identify the target process to which the BML type Account integration applies.
4. From the associated **Navigation** menu, select **Documents**.
5. Click **List**. The **Document List** page opens.
6. Select **Actions** from the **Navigation** menu at the Transaction level.
7. Click **List**. The **Action List** page opens.
8. Select the **Autofill/Refresh Address** action. The `_auto_fill_action` detail page opens.
9. Select the **Modify** tab.
10. Set all the attributes you want to auto-populate in the Oracle Quote to **Leave Value Unchanged**.
11. Select the **Mappings** tab. All of the attributes available in the Oracle CPQ Account object display.

- Map the attributes to Transaction attributes. The **Autofill** action retrieves the mapped account values and saves them to the Oracle Quote.



- Select the **Integration** tab.

- From the **CRM Mapping** menu, select the Account Import Integration.

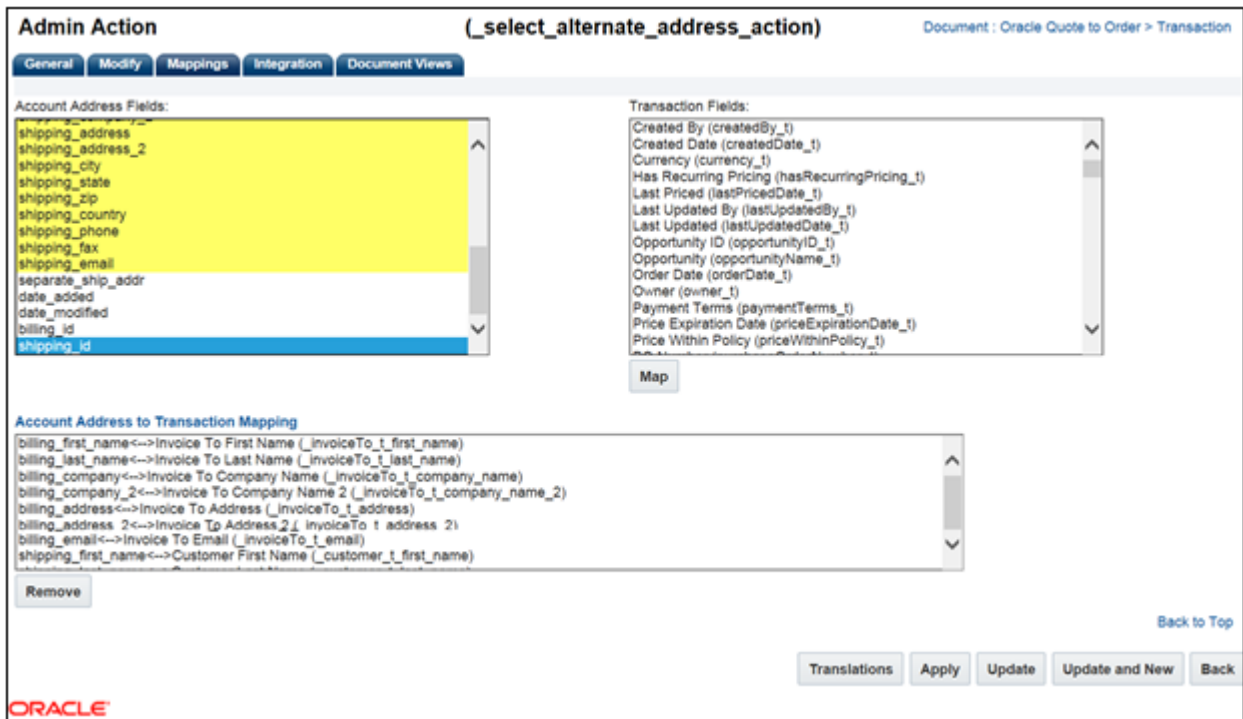


- Click **Apply**.

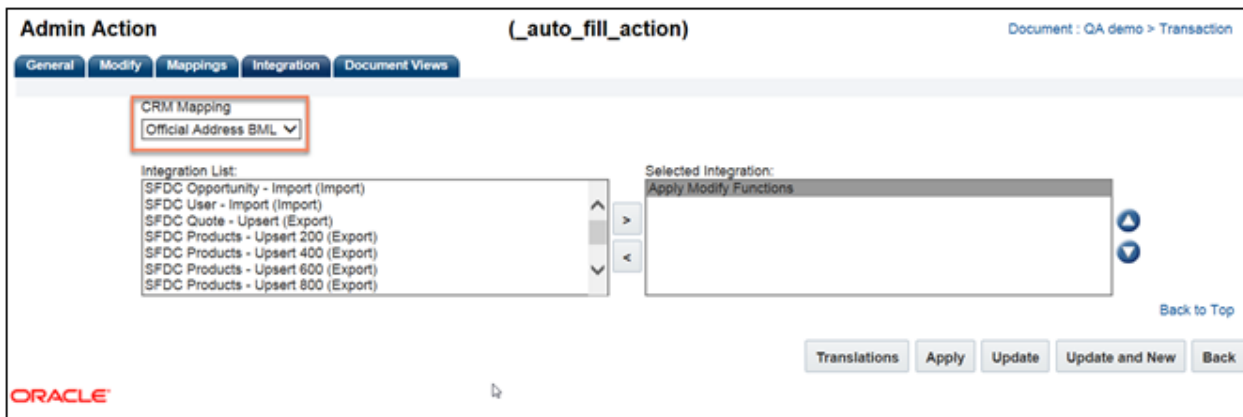
To add the Address Integration to the Select Alternate Address action, perform the following steps:

- Open the Admin Home page.
- Select **Process Definition** under **Commerce and Documents**. The **Processes** page opens.
- Identify the target process to which the BML type Account integration applies.
- From the associated **Navigation** menu, select **Documents**.
- Click **List**. The **Document List** page opens.
- Select **Actions** from the **Navigation** menu located at the Transaction level.
- Click **List**. The Action List page opens.
- Select the **Select An Alternate Address** action (i.e. `_select_alternate_address_action`). The `_select_alternate_address_action` detail page opens.
- Select the **Modify** tab.

- Set all the attributes to auto-populate in the Oracle Quote to **Save From Form**.
- Select the **Mappings** tab. All of the attributes available in the Oracle CPQ Address object display.
- Map the Account Address attributes you want to display in the Oracle Quote to Transaction attributes.



- Select the **Integration** tab.
- From the **CRM Mapping** menu, select the name of your BML type Account integration.



- Click **Apply**.

SYNCHRONIZE QUOTE LINES TO OPPORTUNITY PRODUCTS

When a sales rep is ready to activate a Quote, thereby pushing the product and pricing information to the Opportunity for forecasting, they can check a box on the Quote and initiate a Save and Sync. The Dynamics Integration migration package includes an attribute which functions in conjunction with the actions and integrations previously defined called the Quote is Primary attribute. This attribute is a Boolean attribute type which can be checked and unchecked to toggle the Opportunity Product syncing behavior.

When users click the **Quote is Primary** checkbox on a Quote marked as the "primary" or "active" Quote on the Opportunity, the line items on the primary Quote are synced to the Opportunity as Opportunity products. If you have synchronized your price books, these Opportunity Products will be synced as Price List Items.

Notes:

- Before line items can be synced as Price List items, administrators must complete the procedures in [Parts Sync](#).
- Once the Price List has been assigned to the Opportunity and products have been added the price list cannot be changed.

To set up the Quote is Primary attribute on the Main Document follow these steps.

1. Open the Admin Home page.
2. Select **Process Definition** under Commerce and Documents. The **Processes** page opens.
3. From the **Navigation** menu next to the target process, select **Documents**. Click **List**. The **Document List** page opens.
4. From the **Navigation** menu next to the main document, select **JET Responsive Layout**. Click **List**. The **Actions List JET Layout Editor** page opens.
5. Open the **Add** menu and select **Attributes**. The Attributes pane displays.
6. In the Filter type **Quote is Primary**. The attribute will display in the results.
7. Drag the **Quote is Primary** attribute onto the page layout in a prominent location.
8. Click **Save**.
9. **Deploy** the process.

PARTS SYNC

In order to create Opportunity Products as part of your Opportunity and Quote synchronization, those products must exist in both Dynamics and Oracle CPQ. This also establishes a master product list that prevents duplicate product data and ensures consistent pricing.

This section provides instructions for the following activities:

- Verify the Parts Master
- Synchronizing Price Books and Parts
- Specifying the Unit of Measure

Note: The automated **Parts Integration** features are not supported with Microsoft Dynamics 365. Any attempts to import or export parts using this capability will result in errors.

Verify the Parts Master

Determining the system to be your Parts Master is a choice that administrators must make when designing the initial setup of the system. By default, the Base Reference Application, as provisioned with new Oracle CPQ sites, assigns Oracle CPQ as the Parts Master. However, this assignment is not used explicitly in the Dynamics parts setup. Your specific business process should drive the decision of the Parts Master selection. Generally, we recommend using CPQ as your Parts Master, but you can choose Dynamics as your parts master or another master data management solution. Regardless of your choice, you must ensure that both Dynamics and CPQ have a synchronized representation of your parts list.

Note: In order to change your Parts Master assignment, you must log an SR in My Oracle Support. Refer to [Log an Oracle CPQ Connector for Microsoft Dynamics 365 Service Request](#). When using the Dynamics integration changing this will have no effect on the system behavior.

To check your current Parts Master selection, complete the following steps:

1. Log in as SuperUser.

Note: To view the **Parts Integration Settings** page, you must be logged in as SuperUser

2. Navigate to Admin Home page.
3. Click **Parts**. The **Parts Administration** page displays.
4. Under the **Item Master** section, the selected Parts Master displays. The two available options are:
 - BigMachines - indicates Oracle CPQ as the Parts Master
 - Partner - indicates Dynamics or other as the Parts Master.

Synchronizing Price Books and Parts

Once you've selected your Parts Master and you have created your products and price books in that system, you're ready to synchronize your products/parts and price lists/books between systems. Until you have completed this step, you are not able to successfully synchronize quotes with opportunities.

Note: The steps outlined below will cover the basic process for manually mapping and updating the data across systems, however the ultimate process that your business settles on should be governed by the requirements laid out by the business stakeholders. In most situations an automated process is preferred, sometimes using web services, bulk data services with SFTP or middleware, and the configuration of such a custom flow is outside the scope of this document. You should contact your System Integrator if you have questions around this process.

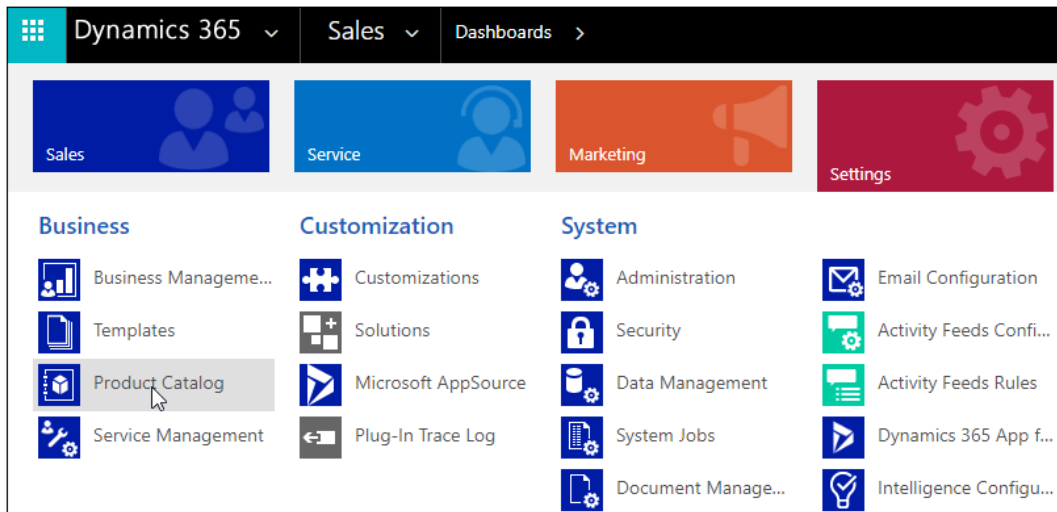
PRICE BOOK MAPPING

Unless you are using Write-In products, all products in Dynamics are typically contained in at least one Price List. Often customers use multiple Price Books to organize their products and segment their pricing. Before you can sync parts, you must manually map each Price List ID from Dynamics to the corresponding Price Book in CPQ.

Note: If you were not previously using Price Lists in either Dynamics or CPQ, you may need to create those records in each system before they can be mapped. Refer to the online help for each application for more details.

To retrieve the Price List ID from Dynamics, perform the following steps:

1. Log in to Dynamics 365 as an administrator.
2. Open the **Sales** menu from the top navigation bar.
3. Click **Settings**.
4. Click the **Product Catalog** link.



5. Click the **Price Lists** link.

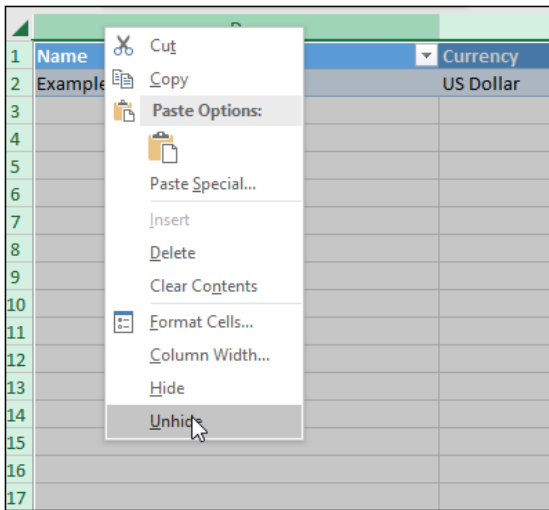


6. From the **Active Price Lists** page, click **Export to Excel**.
7. Open the downloaded Excel file. If necessary, click **Enable Editing**.

- You may also need to unhide the column containing the price list ID. This can be done by selecting all columns by clicking the triangle in the upper left corner.

	D	E
1	Name	Currency
2	Example Price List	US Dollar
3		
4		
5		
6		
7		
8		

- Right-click the first column header and select **Unhide**.



- Verify that column A contains an ID.

1	(Do Not Modify) Price List
2	4ef2f322-3c7e-e811-a969-000d3a1bee29
3	

- Record this value.

Next, you need to map the exported Price List ID to the associated Price Book in Oracle CPQ. To do so, perform the following steps:

- Log into Oracle CPQ as a FullAccess user.
- Open the Admin Home page.
- Under **Products**, select **Parts**. The **Part Administration** page opens.
- Click **List** in the **Price Book** area of the page. The **Price Book Administration List** page opens.
- Select the name of the Price Book to update. The **Price Book Administration** page opens.
- Paste the paired Price List ID into the **Partner Price Book Id** field.
- Click **Update**.
- Repeat the above steps for each paired Price List.

EXPORT PARTS AND PRICE BOOK ASSOCIATIONS FROM ORACLE CPQ

Once you have completed the previous steps, you are ready to export part data from Oracle CPQ.

To export parts from Oracle CPQ, perform the following steps.

1. Open the Admin Home page.
2. Navigate to **Utilities > Bulk Data Services > Download**. The **Download Category List** page opens.
3. Select the **Parts** radio button.
4. Click **Next**. The **Search Criteria** page opens.
5. Select **CSV** as the **Download Format**.
6. Enter search criteria to filter the resulting export as desired.
7. Click **Download**.
8. When the download completes, click the **Module** link on the **Download Status** page to download the results.
9. Optionally, if you are using Price Book Associations you will repeat these steps to export them as well.

IMPORT PRODUCTS INTO DYNAMICS

Once the parts have been retrieved from CPQ, you can prepare the upload file and import them into Dynamics.

To import Oracle CPQ parts to Dynamics 365, perform the following steps:

1. Log in to Dynamics 365.
2. Under the **Sales** menu in the top navigation bar, select **Settings**.
3. Select **Data Management**. The **Data Management** page opens.
4. Select **Templates for Data Import**.
5. From the menu select **Product**. Click **Download**.
6. Retrieve the Parts CSV from [Export Parts and Price Book Associations from Oracle CPQ](#).
7. Using the template you just downloaded, prepare your upload file using the CSV editor of your choice. Copy the parts exported in the prior section into the file and populate the associated columns to their Dynamics counterpart. Ensure all required fields are populated.
8. Next, Select **Imports**. The **My Imports** page opens.
9. Click **IMPORT DATA**. The **Upload Data File** dialog opens.
10. Select the file containing the parts.
11. Click **Next**.
12. Review the mapping dialog.
13. Click **OK**.

14. Click to allow or disallow duplicates and assign an owner for the import.

Review Settings and Import Data Help

⚠ This action will update existing records, and, if required, create new records.

Review the default settings, make the necessary changes, and submit the data for import.

Allow Duplicates

No
 Yes

Duplicate records will be determined based on the duplicate detection settings in Microsoft Dynamics 365.

Select Owner for Imported Records

🔍

This user will own the imported records if the records do not contain owner information or if the records cannot be assigned to the specified owners.

Back Submit Cancel

15. Click **Submit**.

16. Click **Finish**.

ACTIVATE DYNAMICS 365 PRODUCTS

The products in the Dynamics 365 site must be active before they can be added to an Opportunity. If they were imported in the prior step with the Status set to “Draft” and thus are inactive, administrators can bulk activate the products. For additional information, refer to the Microsoft Dynamics 365 documentation.

To activate Dynamics 365 products, perform the following steps:

1. Log in to Dynamics 365.
2. Open the **Sales** menu from the top navigation bar.
3. Select **Settings**.
4. Select the **Product Catalog** link.
5. Select **Families & Products**.

Dynamics 365 Settings Product Catalog

Families & Products
A product is an item in the product catalog that you want to sell to your customers. In this section, you manage products, set up product family hierarchies, create product bundles, and manage properties of product records. You can publish, revise, or retire product records, and also reclassify them to move them to other areas of the product catalog.

Price Lists
A price list specifies what prices can be charged for each unit in the unit group of a product. In this section, you create, manage, and delete price list line items and price lists in the product catalog. You associate and disassociate products with price lists. You also specify various pricing options in the price list line items, such as the quantity selling option, the pricing method, and the rounding options.

Discount Lists
A discount list contains the specific discounts that can be applied to a product, based on volume purchased. In this section, you create, manage, and delete discount lists in the product catalog.

Unit Groups
A unit group contains the base unit a product is available in, such as a liter, and then lists all the different increments that this base unit is packaged for sale. For example, if the base unit is a two-liter bottle, then that product could be sold individually as a two-liter bottle or in a case containing 6 two-liter bottles. In this section, you create, manage, and delete units and unit groups in the product catalog.

6. From the **All Products, Families & Bundles** page, select **EXPORT TO EXCEL**.

7. Save the file.
8. Open the downloaded spreadsheet.
9. Set the **Status** column to “Active” for all products you want to activate.
10. Save the spreadsheet.
11. Under the **Sales** menu in the top navigation bar, select **Settings**.
12. Select **Data Management**. The **Data Management** page opens.
13. Select **Imports**. The **My Imports** page opens.
14. Click **IMPORT DATA**.
15. Follow the import wizard’s steps. The products are now activated.

IMPORTING PRICE LIST ENTRIES

Now that you have uploaded products to Dynamics, you can now add them to Price Lists and assign them prices.

To import Oracle CPQ price book associations to Dynamics 365, perform the following steps:

1. Log in to Dynamics 365.
2. Under the **Sales** menu in the top navigation bar, select **Settings**.
3. Select **Data Management**. The **Data Management** page opens.
4. Select **Templates for Data Import**.
5. From the menu select **Price List Items**. Click **Download**.
6. Retrieve the Price Book Associations CSV from [Export Parts and Price Book Associations from Oracle CPQ](#).
7. Using the template you just downloaded, prepare your upload file using the CSV editor of your choice. Copy the price book associations exported in the previous section into the file and populate the associated columns to their Dynamics counterpart. You will also need to supply the Price List name and Product name created in previous steps into this file. Ensure all required fields are populated.
8. Next, Select **Imports**. The **My Imports** page opens.
9. Click **IMPORT DATA**. The **Upload Data File** dialog opens.
10. Select the file containing the price book associations.
11. Click **Next**.
12. Review the mapping dialog.
13. Click **OK**.

14. Click to allow or disallow duplicates and assign an owner for the import.

Review Settings and Import Data Help

⚠ This action will update existing records, and, if required, create new records.

Review the default settings, make the necessary changes, and submit the data for import.

Allow Duplicates

No
 Yes

Duplicate records will be determined based on the duplicate detection settings in Microsoft Dynamics 365.

Select Owner for Imported Records

🔍

This user will own the imported records if the records do not contain owner information or if the records cannot be assigned to the specified owners.

Back Submit Cancel

15. Click **Submit**.
16. Click **Finish**.
17. Repeat these steps for each remaining price list.

UPDATE PARTS IN ORACLE CPQ

Once you've created the product and price list data in Dynamics, you need to associate these new records with the originating parts and price book data in CPQ.

First you need to retrieve the Price List Entry IDs that were created in the previous step. Follow these steps:

1. Log in to Dynamics 365.
2. Under the **Sales** menu in the top navigation bar, select **Settings**.
3. Navigate to the **Product Catalog** area.
4. Click on **Families and Products**.
5. Click on **Export to Excel** to download the products.
6. Open the downloaded file. Unhide all columns.
7. Retrieve the Parts CSV from Export Parts and Price Book Associations from Oracle CPQ.
8. Copy the **Product IDs** from the exported Products file into **partner_part_id** column in the Parts CSV, taking care that the rows in each file are correctly mapped using your preferred CSV editor.
9. Set the **Update** column to "Update" for all parts.
10. **Save** the CSV.
11. Return to the **Product Catalog** area.
12. Click on **Price Lists**.
13. Select the Price List that you updated in the previous step.

14. Under **Price List Items** click on the grid icon to display all items associated with this price list.
15. Click on **Export Price List Items** to download the items.
16. Open the downloaded file. Unhide all columns.
17. Retrieve the Price Book Associations CSV from Export Parts and Price Book Associations from Oracle CPQ.
18. Copy the **Price List IDs** from the exported Price List file into **partner_price_book_entry_id** column in the Parts CSV, taking care that the rows in each file are correctly mapped using your preferred CSV editor.
19. Set the **Update** column to “Update” for all parts.
20. **Save** the CSV.
21. Log into Oracle CPQ as a FullAccess user.
22. Navigate to **Utilities > Bulk Data Services > Upload**. The **Upload Files List** page opens.
23. Click **Choose File** from the Add Files For Upload section.
24. Select the **Parts CSV** from the previous steps.
25. Click **Add**.
26. Select uploaded file and click **Upload**.
27. When the upload completes, click the **Log** link to view the results.
28. Repeat the previous 5 steps for the **Price Book Associations CSV** file.
29. It is recommended that you spot check a few parts to validate that the partner_part_id and the partner_price_book_entry_id were applied correctly.

IMPORT PARTS AND PRICE BOOK ASSOCIATIONS TO ORACLE CPQ

If your business process requires you to inverse the previous process, mastering your products and pricing in Microsoft Dynamics and exporting the data to Oracle CPQ you can follow the below steps. This process is not documented in granular detail because many of the steps are identical to those in the previous sections. These steps will outline the high-level order of operations.

To export products and prices from Dynamics and import them into CPQ, follow the below steps.

1. Log into Dynamics and navigate to the Product Catalog.
2. Export the Price Lists and unhide the Price List IDs.
3. Export the Price List Entries and unhide the Price List Entry IDs.
4. Export the Products and unhide the Product IDs.
5. Log into Oracle CPQ and navigate to the Downloads section of Bulk Data Services.
6. Download the Parts and Price Book Associations files to use as an upload template.
7. Create the Price Books in CPQ that will be associated with the existing Dynamics Price Lists.
8. Populate the partner_price_book_id following the steps described in Price Book Mapping.
9. Copy the Product data from the from the exported Products file into the Parts upload template.
10. Upload the Parts into CPQ and validate that the partner_part_id and other part fields are correctly populated.
11. Copy the Price List Entry data from the exported Price List Entry file into the Price Book Associations upload template. Ensure that the previously created price book varnames are populated in the price_book_variable_name column.
12. Upload the Price Book Associations and validate that the partner_price_book_entry_id and other prices are correctly populated.

Specify Unit of Measure

To create Opportunity line items linked to Dynamics products, administrators must specify a unit of measure for the opportunity items.

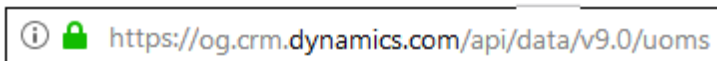
In the supplied Dynamics Integration migration package, the “`commerce.mSDYNEExportDataForLines()`” library function hard codes the unit of measure ID under the variable unit of measure. Administrators will need to update the “`uomid`” in the “`commerce.mSDYNEExportDataForLines()`” library function to match the unit of measure ID in their organization. See the code snippet below for reference.

```
48 // UOM ID - may be different for each org, so update as necessary
49 uomid = "2acda961-f74c-4ec2-aea5-bce3a863a3ea";
```

Note: If your organization uses multiple units of measure you will need to assign the units of measure dynamically in CPQ. This can be accomplished using CPQ’s units of measure, custom part attributes, formula management or BML libraries but that implementation is outside the scope of this document. You should contact your System Integrator if you have questions around this process.

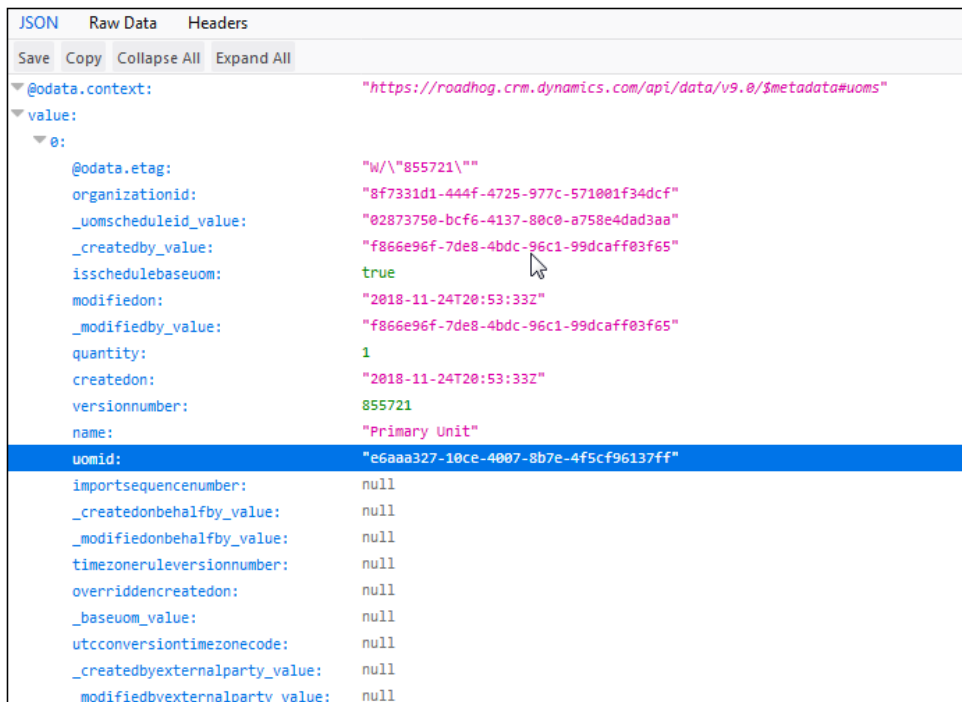
To locate the Unit of Measure ID in Dynamics, perform the following steps:

1. Log into Microsoft Dynamics as an administrator.
2. Using a browser or an API client, view the Units of Measure endpoint. This endpoint takes the format of: `[organization URI]/api/data/v9.0/uoms`
For example:



<https://og.crm.dynamics.com/api/data/v9.0/uoms>

3. Within the results, locate “`uomid`” field.



```
JSON Raw Data Headers
Save Copy Collapse All Expand All
@odata.context: "https://roadhog.crm.dynamics.com/api/data/v9.0/$metadata#uoms"
value:
  0:
    @odata.etag: "W/"855721\"
    organizationid: "8f7331d1-444f-4725-977c-571001f34dcf"
    _uomscheduleid_value: "02873750-bcf6-4137-80c0-a758e4dad3aa"
    _createdby_value: "f866e96f-7de8-4bdc-96c1-99dcaff03f65"
    isschedulebaseuom: true
    modifiedon: "2018-11-24T20:53:33Z"
    _modifiedby_value: "f866e96f-7de8-4bdc-96c1-99dcaff03f65"
    quantity: 1
    createdon: "2018-11-24T20:53:33Z"
    versionnumber: 855721
    name: "Primary Unit"
    uomid: "e6aaa327-10ce-4007-8b7e-4f5cf96137ff"
    importsequencenumber: null
    _createdonbehalfby_value: null
    _modifiedonbehalfby_value: null
    timezoneruleversionnumber: null
    overriddencreatedon: null
    _baseuom_value: null
    utcconversiontimezonecode: null
    _createdbyexternalparty_value: null
    _modifiedbyexternalparty_value: null
```

4. Record this value.
5. Next, you must update the `commerce.mSDYNEExportDataForLines()` function on your Commerce Process. To do so, perform the following steps.
6. Log into Oracle CPQ as a FullAccess user.
7. Go to the Admin Home page.

8. Click on **Process Definition**. The **Processes** page displays,
9. Locate your Process and choose **Documents** from the navigation menu and click **List**. The Documents List displays.
10. Locate your main document, typically labeled **Transaction**, and choose **Library Functions** from the navigation menu and click **List**. The Commerce BML Library Functions List displays.
11. Locate the **Export Data For Lines** function from the list and click the link. The BML editor opens.
12. Locate the line in the function that sets the value for the uomid and update it to set it to the uom ID value retrieved above.
13. Click **Update**.
14. Deploy the Process.

USER PAIRING

Integrated users will have two user accounts—one in Dynamics and one in Oracle CPQ. Once users are provisioned and paired, users are able to Single Sign On (SSO) from Dynamics to Oracle CPQ.

Manually Integrate Users from Oracle CPQ

If you have users in Oracle CPQ which need to be paired to Dynamics users, you can manually create the connection. This establishes the relationship between the two user accounts and prepares them for SSO.

These steps are similar to the integration user pairing except with other user types. You can repeat these steps for as many users as required.

Note: Do not proceed with this process until Oracle CPQ Support has completed the Service Request to establish the security and connected app. Refer to [Log an Oracle CPQ Connector for Microsoft Dynamics 365 Service Request](#).

PAIR USER AND GENERATE TOKEN

The first step for integrating users is to pair the user accounts across systems. This is done by entering the Dynamics username that corresponds to the CPQ user on the User Integration page. In this section, we describe how to manually pair users.

Once users have been paired, a user token can be generated before those users are allowed to SSO from Dynamics into Oracle CPQ. If a token is not manually generated, it will automatically be generated when that user punches in from Dynamics for the first time. Once a user has generated this token, they will continue to be able to sign on from Dynamics even after their Dynamics or CPQ user password changes. This section describes how to manually generate the token. If a user has been paired, but a token has not been generated, the user is prompted to do so when they first attempt to login to Oracle CPQ.

Note: Before you begin, log out of all Microsoft Dynamics instances so that you do not accidentally pair to the wrong user account or organization.

To pair a user and generate a token, complete the following steps:

1. Log into Oracle CPQ with the **Username** and **Password** for the user to be paired.

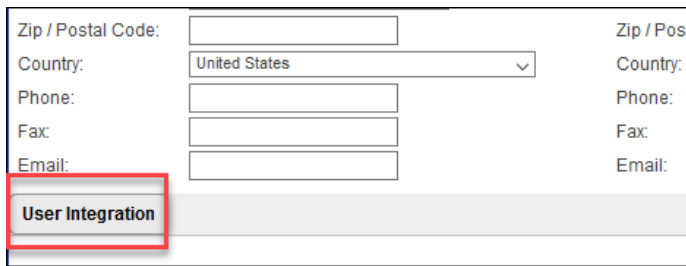


2. Click the **My Profile** icon in the Navigation bar at the top of the page.



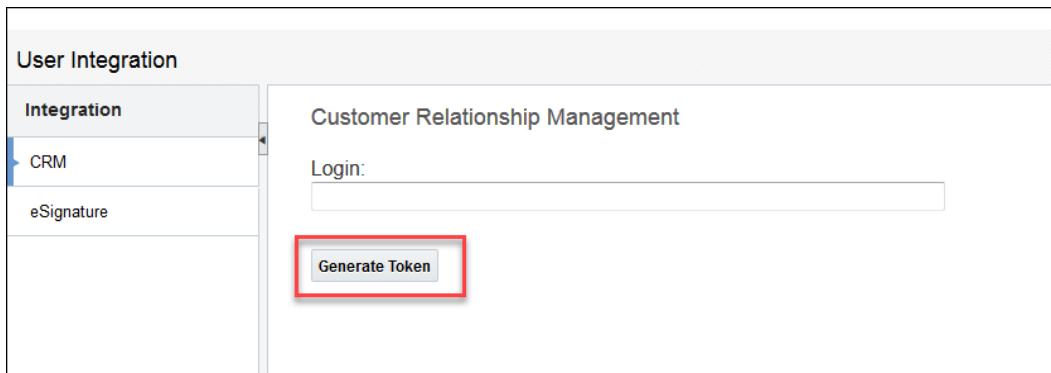
Note: The **My Profile** icon and location may vary based on your CPQ site configuration.

3. Click **User Integration**.



Zip / Postal Code: Zip / Pos
Country: United States Country:
Phone: Phone:
Fax: Fax:
Email: Email:
User Integration

4. Enter the **Dynamics Username** that you are pairing to in the **Login** field.
5. Click Generate Token.



User Integration

Integration

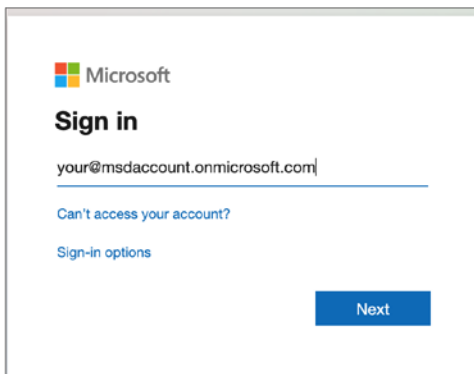
- CRM
- eSignature

Customer Relationship Management

Login:

Generate Token

6. Log in to **Dynamics** with the credentials for the user account you want to integrate.



Microsoft

Sign in

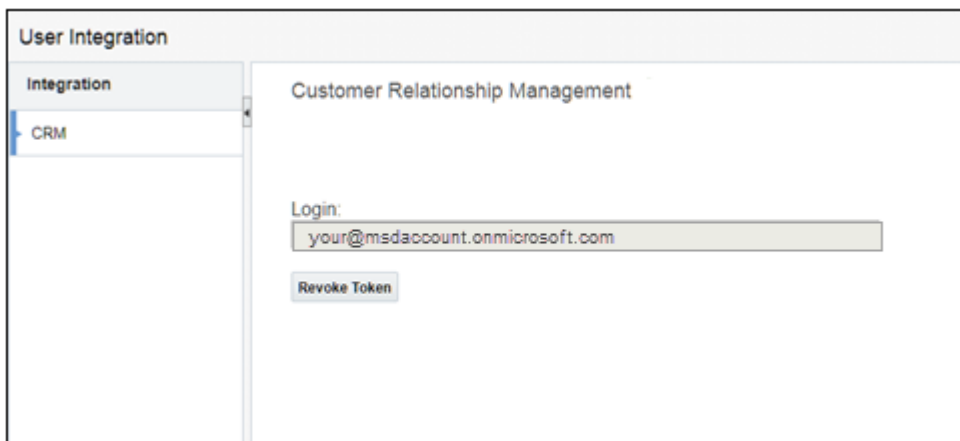
your@msdaccount.onmicrosoft.com

[Can't access your account?](#)

[Sign-in options](#)

Next

The **User Integration** page displays with confirmation that the Token Generated



User Integration

Integration

- CRM

Customer Relationship Management

Login: your@msdaccount.onmicrosoft.com

Revoke Token

Note: If you try to access Oracle CPQ from Dynamics with a user that has not been paired, they will see errors when trying to open quotes.

APPENDIX A: MIGRATION PACKAGE COMPONENTS

The components included in the Microsoft Dynamics Integration package are identified in the following tables.

COMMERCE MAIN DOCUMENT ATTRIBUTES		
Attribute Name	Variable Name	Description
Opportunity ID	mSDYNOpportunityId_t	ID of MS Dynamics Opportunity entity record. When a quote is created in Dynamics 365, the Oracle CPQ Transaction receives the Dynamics 365 "Opportunity ID".
Quote ID	mSDYNQuoteId_t	ID of MS Dynamics Oracle Quote entity record
Quote Is Primary	mSDYNIsPrimaryQuote_t	Boolean to indicate the Quote is the primary Quote on the Opportunity entity record. This tells the system to create Opportunity Line Item records when the systems are synchronized.
Primary Quote ID	mSDYNPrimaryQuoteId_t	ID of Microsoft Dynamics Oracle Quote entity record that is marked as primary on the Opportunity entity record.
Opportunity Line IDs	mSDYNOpportunityLineIds_t	List of all line item IDs that exist on the Opportunity in Microsoft Dynamics.

COMMERCE SUB-DOCUMENT ATTRIBUTES		
Attribute Name	Variable Name	Description
Opportunity ID	mSDYNOpportunityId_l	ID of MS Dynamics Opportunity entity record.
Opportunity Line ID	mSDYNOpportunityLineId_l	ID of Microsoft Dynamics Opportunity Line entity record.

COMMERCE LIBRARY FUNCTIONS		
Attribute Name	Variable Name	Description
Collect Quote Fields	mSDYNCollectQuoteFields	Function for administrator to update with main document attributes mapped in the Import and Export mapping tables
Collect Line Fields	mSDYNCollectLineFields	Function for administrator to update with sub document attributes mapped in the Import and Export mapping tables
Import Data For Quote	mSDYNImportDataForQuote	Imports quote data from Dynamics
Export Data For Quote	mSDYNExportDataForQuote	Exports quote main doc data to Dynamics. Supports writing to CPQ Quote and Opportunity entities.
Upsert Primary Flag	mSDYNUpsertPrimaryFlag	Sets the primary quote id in Dynamics

COMMERCE LIBRARY FUNCTIONS

Export Data For Lines	mSDYNExportDataForLines	Exports quote main doc data to Dynamics
-----------------------	-------------------------	---

BML LIBRARY FUNCTIONS

Attribute Name	Variable Name	Description
Convert Batch Response To Info Pool	convertMSDYNBatchResponseToInfoPoolUtil_util	Converts batch responses into a dictionary of string dictionaries-Key[Content-Id(string)]:Value[batch response for a single job(string dictionary)]
Get Callout Settings	getMSDYNCalloutSettingsDict_util	Gathers information to make internal REST callouts [CPQ for Doc/SubDoc data], as well as external [MS Dynamics]
Get Field Mappings	getMSDYNFieldMappings_util	Gathers mappings of MS Dynamics entity fields to CPQ doc/subdoc attributes
Get Child IDs	mSDYNGetChildIDs_util	Queries dynamics for all the child object IDs with a given parent. During opportunity product synchronization, this is used to determine what products to delete.
Process Response	processMSDYNResponse_util	Takes in the response of a call to create or update a singular entity record in MS Dynamics and parses out the ID of the record(SUCCESS) or an error message(FAILURE)
Map JSON Attrs By Type	mapJsonAttrsByType_util	Takes in a source js object, and maps its values to a target js object, while typing and substituting values where necessary.
Process Import Data	mSDYNProcessImportData_util	Handles mapping of main doc fields, as we only need to handle syncing of quote level data on initial import

DATA TABLES

Table Name	Description
CalloutSettings	Holds integration settings
ImportMappings	Holds mapping of Microsoft Dynamics entity fields to OCPQ attributes
ExportMappings	Holds mapping of OCPQ attributes to Microsoft Dynamics entity fields

APPENDIX B: DYNAMICS SOLUTION COMPONENTS

The components included in the Oracle CPQ Connector for Microsoft Dynamics 365 solution are identified in the following tables.

Packaged Components

COMPONENT	DESCRIPTION
Oracle Quote Entity	The representation of a CPQ Commerce Transaction, appearing as a list on the Opportunity page. This entity is where new quotes are created from and shows a list of any previously created quotes. Clicking a quote in this list opens that record for editing.
CPQ Site Settings Entity	Allows administrator to supply a number of parameters for retrieval by the integrated Oracle CPQ site.
Opportunity Entity	The representation of the Dynamics 365 Opportunity, which stores the Oracle Quotes displayed in the Oracle Quote entity.
CPQ Admin	The Admin security role name.
CPQ Admin Field Security Profile	Gives create, update, and delete rights to the Opportunity, Oracle Quote, and CPQ Site Settings.
CPQ Sales	The Sales security role name.
CPQ Sales Field Security Profile	Gives create, update, and delete rights to the Opportunity and Oracle Quote and read access to CPQ Site Settings.
Web Resources	<p>Includes the following:</p> <ul style="list-style-type: none"> • CPQ iFrame Loader: Display name of the javascript supports the display of the Oracle Quote page within an iFrame in Dynamics 365 when users create or edit quotes from Dynamics 365. • ocpq_iframe_loader: The API name of the javascript that assists with the flow for creating and editing quotes. • ocpq_style: The CSS file that styles the Oracle Quote page holding the iFrame. • ocpq_oq_icon_large: The Oracle Quote icon (32 px) • ocpq_oq_icon_small: The Oracle Quote icon (16 px) • ocpq_oa_icon_large: The CPQ Site Setting icon (32 px) • ocpq_oa_icon_small: The CPQ Site Setting icon (32 px)

Oracle Quote Entity

The following table identifies the fields available in the Oracle Quote entity.

cpq_oracle_quote		
Field Name	Label	Description
ocpq_name	Name	Holds the name of the Oracle CPQ Transaction.
ocpq_oracle_quoteid	Oracle Quote	Holds the unique identifier for entity instances.
ocpq_opportunity_id	Opportunity ID	Holds the lookup to the Opportunity record.
ocpq_cpq_site_setting_id	CPQ Site	Holds the unique identifier needed to connect to the correct Oracle CPQ instance.
ocpq_bs_id	Buyside ID	Holds the Buyside ID associated with the Oracle CPQ Transaction.

CPQ Site Settings Fields

The following table identifies the fields available in the CPQ Site Settings entity.

cpq__cpq_site_setting		
Field Name	Label	Description
ocpq_name	Name	Holds the display name of the Oracle CPQ site.
ocpq_process	Process Name	Holds the varname of the Oracle CPQ Commerce process.
ocpq_process_id	Commerce Process ID	Holds the ID of the Oracle CPQ Commerce process.
ocpq_action_id_open	Open Action ID	Holds the ID of the integration action that executes upon entering the Oracle Quote page to edit a quote.
ocpq_document_id	Document ID	Holds the ID of the Oracle CPQ Document.
ocpq_url	Site Domain	Holds the URL of the root domain of the Oracle CPQ site. Include the https:// Note: The CPQ site must have SSL enabled
ocpq_site_settings_id	CPQ Site Settings	Holds the unique identifier needed to connect to the correct Oracle CPQ instance.

APPENDIX C: CUSTOMIZATION AND EXTENSIBILITY

This section provides information about optional customized integration behaviors that you may want to implement.

Using URL Data Functions to Access Microsoft Dynamics 365 Web Services

When integrating Oracle CPQ with a CRM system such as Microsoft Dynamics 365, the integration uses an OAuth access token to authenticate user access to the CRM system. Generated automatically when the user accesses Oracle CPQ from the CRM system, the token supports the synchronization of data between Oracle CPQ and the CRM system.

Oracle CPQ Release 17D and later allows administrators to use a BML function to retrieve a user's access token during a Microsoft Dynamics 365 integrated session. By inserting an access token into the header of a BML URL data function, Oracle CPQ can securely write data to Dynamics 365.

```
$_access_token_dynamics365$ - For Microsoft Dynamics 365 integrated sessions
```

When using OAuth-based Single Sign-On from Dynamics 365 to access Oracle CPQ, the system replaces the access token variables above in an "urlData" function with the user's active access token. This establishes a secure connection between Oracle CPQ and Dynamics 365.

For example:

The header would appear as follows to request a list of Microsoft Dynamics 365 opportunities:

```
headers=dict("string");  
put(headers, "Authorization", "Bearer $_access_token_dynamics365");  
response=urldata(https://api/data/v8.2/opportunities , GET, headers);  
print response; //prints out opportunity information
```

Note:

- If the user does not have an integrated session, the access token variable is replaced with a blank.
- The partner login icon will generate a token for the user as long as the user has generated a token and logged in at least once in the past.
- An invalid or expired access token results in an error from the target system.

TROUBLESHOOTING

The section provides an up-to-date list of both helpful insights and solutions to known issues regarding the Oracle CPQ Connector for Microsoft Dynamics 365. This information is intended for administrators and developers because it provides implementation help and solutions to known issues.

Troubleshooting Issues

If you are encountering a problem the table below may have a solution to your issue.

ISSUE	POSSIBLE SOLUTION
<p>❗ Products are being synced as Write In products and not as Price List Items.</p>	<p>Older versions of the Microsoft Dynamics Integration Package did not use Price Lists. If are upgrading and wish to use Price Lists, administrators must perform the following steps:</p> <ol style="list-style-type: none"> 1. Edit the msDYNUpsertPrimaryFlag.bml commerce library in your process. 2. Add your <code>_partner_price_book_id</code> as quote level input. 3. Find the <code>pricebook = ""</code>; line in the commerce library. 4. Change the double quotes to the variable name. 5. For example: <code>pricebook = _transaction_partner_price_book_id</code>; 6. Save the changes to the library. 7. Deploy Commerce.
<p>❗ The mSDYNEExportDataForQuote commerce library function is not working properly.</p>	<p>In the mSDYNEExportDataForQuote commerce library function, included in the Microsoft Dynamics migration package, there is a line where a variable's value is assigned to itself:</p> <pre>if(updateQuote) { calloutURL = calloutURL +</pre> <p>Solution: Verify the value of the calloutURL is accurate.</p>
<p>❗ System not responding when opening an opportunity or quote using the Unified UI.</p>	<p>When logged into an Oracle CPQ site using legacy layout and opening an opportunity or CPQ quote using the Unified UI, the site does not respond. After a few minutes, if the user click on a new quote or to edit an existing quote, a script error displays.</p> <p>Solution: Refresh the page or click on the opportunities list to proceed. No data is lost due to this issue.</p>
<p>❗ When using the Unified UI, an error message displays when performing a page refresh while creating a new quote or editing an existing quote.</p>	<p>Perform a MS Dynamics Save action and reopen the quote under the respective opportunity. No data is lost due to this issue.</p>
<p>❗ In the Unified UI, the navigation path displays incorrectly in the page header.</p>	<p>When using the Unified UI navigation path in the page header, check to ensure you are selecting the appropriate location in the navigation path.</p>
<p>❗ When creating a new quote, multiple quotes with the same BSID are created.</p>	<p>Multiple quotes with the same BSID may be created if the Opportunity ID or Part Partner ID is incorrect when entering a new quote.</p> <p>Solution: Verify the correct Opportunity ID and Part Partner ID are entered.</p>

If you do not see a solution to your issue, you can [Log an Oracle CPQ Connector for Microsoft Dynamics 365 Service Request](#).

ADDITIONAL CONSIDERATIONS

Review the following additional information about your Oracle CPQ integration with Microsoft Dynamics 365.

Sandbox Testing

Always install or upgrade the managed solution in a Dynamics sandbox and test the instance of Oracle CPQ before installing or upgrading in production.

Dynamics Integration Support

Oracle officially supports version 1.0, and 0.3 of the Oracle CPQ Connector for Dynamics.

Note: Previous versions of this solution are expected to continue to function; however Oracle will not address new issues that arise. We strongly encourage customers to upgrade to the latest supported version.

Training

Please refer to the release documentation for all versions between your current version and the version to which you are installing to see all new functionality, resolved known issues, and functional known issues.

Refer to the Oracle CPQ Online Help to become familiar with the new features introduced in Oracle CPQ. For additional help, see [My Oracle Support](#).

Verify any information not explicitly mentioned in this document as supported by the software against the product help for Oracle CPQ or the Oracle CPQ Consulting team.

Additional Information

- For more information on Oracle CPQ, visit the [Oracle CPQ Documentation](#) site.
- For information about the sales user experience for creating, updating, and deleting Oracle CPQ Quotes from within Dynamics 365, refer to the *Microsoft Dynamics 365 Integration* section of the [CPQ Cloud Release 18A What's New Document](#) or the Oracle CPQ Administrator Online Help.
- For information about Azure Active Directory, refer to the [Azure Active Directory Documentation](#).
- For information about setting up users and roles in Dynamics 365, refer to the documentation provided on <https://www.office.com>.

DISCLAIMER

The details in this document are provided for high-level informational purposes only and are not intended to function as a specification or to replace the Online Help. Upgrading to a subsequent release may require the re-deployment of Commerce Processes, Configuration, CPQ Site Settings, or global function settings. Modifications to integration XSL files or APIs may also be required.

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