Oracle Configure, Price, Quote

Integrating Oracle Sales with Oracle CPQ

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1 About This Guide

Audience and Scope

Read this guide to understand how to implement and support the integration between Oracle Sales and Oracle Configure, Price, and Quote (Oracle CPQ).

This guide is for new Oracle CPQ customers setting up the Oracle CPQ Reference Application. The Reference Application includes all of the Oracle CPQ implementation artifacts described in this guide. This guide assumes that you have Oracle Sales and Oracle CPQ installed, and that you're already familiar with the two applications.

> **Note:** Existing customers implementing the integration need to adapt these steps to their implementation (instead of the Reference Application).

Audience and Scope

This guide explains integration features that let Sales users:

- Create quotes in Oracle CPQ from Sales accounts and opportunities.
- View and edit those quotes by adding products and pricing information.
- Generate sales proposals and contracts.
- Save the quote details back to Sales for use in forecasts and reports.

To set up and use other standard features, see the Sales and Oracle CPQ documentation on *Oracle Help Center*.

You can use this guide as a starting point when connecting Sales and Oracle CPQ to create value-added business processes and user experiences. Consider the business outcomes you want and your users' individual sales processes when configuring the integration and adapt accordingly. Each implementation is unique and may require additional steps not specified in this guide. The steps in this guide represent a baseline that you can combine with additional integrations and customizations.

This guide describes features available to users under Oracle Sales and Oracle CPQ licensing agreements.

Related Guides and Help

Here's a list of related guides and other help:

Guide or Help	Description
Oracle Cloud Infrastructure Documentation	Contains information about how you can use Oracle Cloud Infrastructure's (OCI) set of complementary cloud services to build and run a range of applications and services in a highly available hosted environment. OCI provides high-performance compute capabilities (as physical hardware instances) and storage capacity in a flexible overlay virtual network that is securely accessible from your on-premises network.

Guide or Help	Description
Oracle Cloud: Administering Oracle Identity Cloud Service	Explains the concepts of identity that are applicable for users in Oracle Cloud. Describes how to integrate Oracle Identity Cloud Service (IDCS) with applications available in the App Catalog.
Oracle Architecture Center SSO Information	Lists the high-level steps to set up Oracle Applications Cloud with single sign-on (SSO)
Oracle Cloud: Using the Oracle CX Sales and B2B Service Adapter with Oracle Integration	Describes how to configure and add the Oracle CX Sales and B2B Service Adapter to an integration in Oracle Integration
Oracle Cloud: Using the Oracle CPQ Cloud Adapter with Oracle Integration	Describes how to configure and add the Oracle CPQ Cloud Adapter to an integration in Oracle Integration
Oracle Fusion Cloud Sales Automation: Implementation Reference (Quotes and Orders chapter)	Contains an overview of the integration, steps for upgrading customers, and details on how to enable UI elements within the Sales application
Oracle CX Securing Sales and Fusion Service	Contains information to help setup users and sales administrators configure access to sales functionality and data
Oracle Fusion Cloud Sales Automation: Using Sales (Quotes chapter)	Aimed at salespeople, sales managers, and other sales users, contains information for these users when performing quoting tasks in the sales applications
Oracle CPQ Online Help	Contains concepts and procedures for the quoting user in Oracle CPQ

2 Introduction

Overview of the Oracle Sales and Oracle CPQ Integration

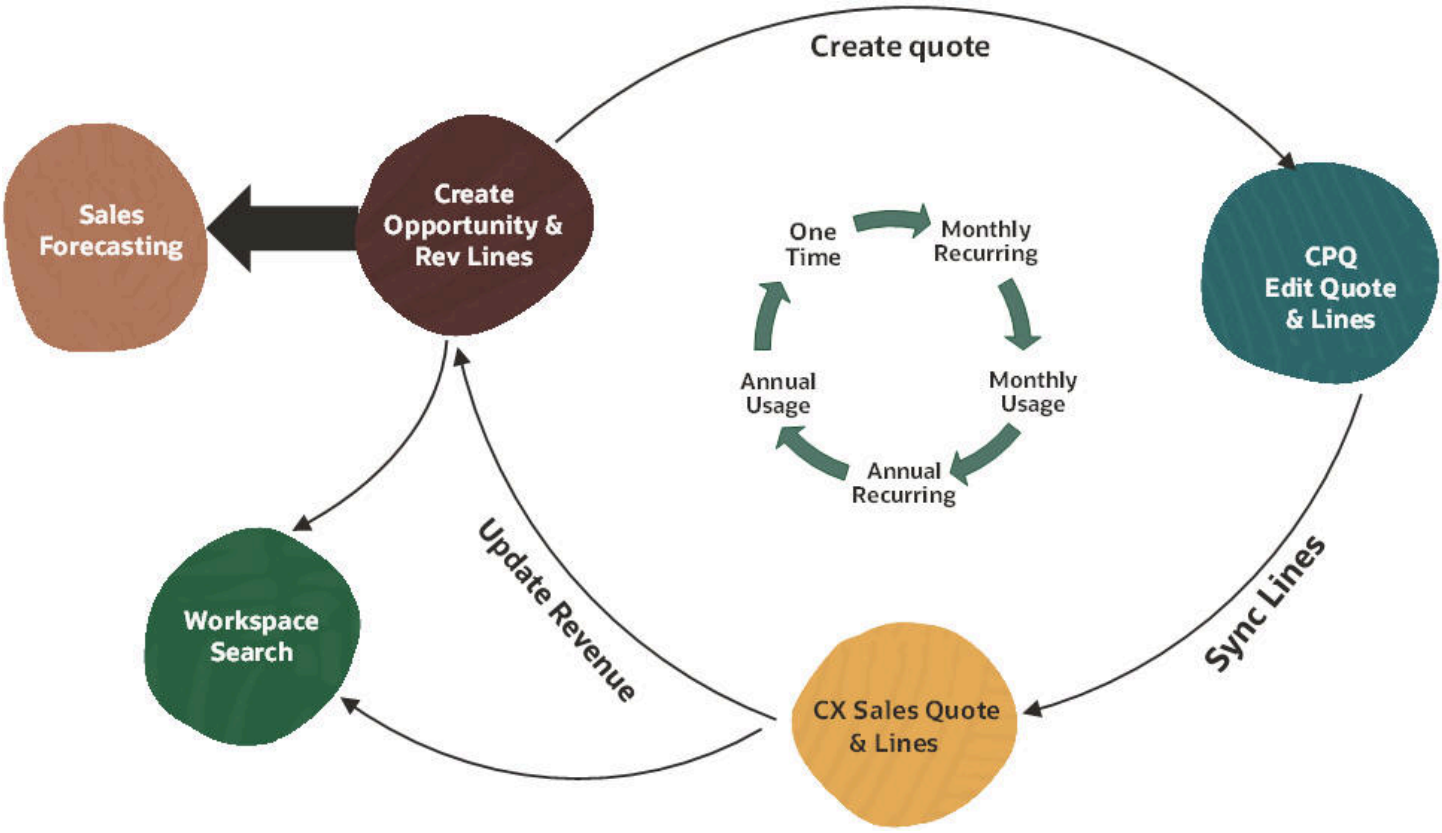
The integration between Oracle Sales and Oracle CPQ supports standard B2B selling processes, which feature highly configurable products, variable or dynamic pricing models, discount negotiations requiring executive approval, and large, branded sales documents.

Oracle CPQ ensures that sales forecasts are reliable and based on real-world quotes. It ensures that sales orders are valid and contain the correct billing and shipping details to eliminate costly change orders. Additionally, quote data feeds back into Sales, so that businesses can analyze and improve the overall efficiency of their sales teams.

The integration steps described in this guide help you configure a solution that combines the power of these applications, while reducing the cost of ownership and the time needed to deploy the application. However, the integration remains configurable and extensible, so it can support a wide range of use cases serving any industry.

Supported Business Flows

The following diagram summarizes the flow of information between CX Sales and Oracle CPQ with a typical integration.



With the integration of Sales and Oracle CPQ, sales users can:

- Create quotes in the Quotes and Orders tab in the opportunity details page. After users create the quote, they can return to the quote and edit the transaction details.
- Create quotes in the Quotes and Orders tab in the account details page. After users create the quote, they can return to the quote and edit the transaction details.
- Duplicate a quote on an opportunity or an account. Duplicating quotes can be a quick method to present alternate solutions to a customer.
- Create versions of a quote on an opportunity or an account. Quote versions let users make changes to a quote while retaining a snapshot of the previous state of the transaction.
- Open previously generated proposal documents directly in the Quotes and Orders tab in accounts and opportunities.
- View summary information about a transaction in the Quotes and Orders tab in accounts and opportunities.
- Sync quotes and quote lines from Oracle CPQ to Sales.

- View a list of currently active and historical quotes and quote lines in Sales Workspace. Search, filter, and sort these quotes and quote lines to locate specific deals and drill into the selected quote.
- Create and update revenue lines on an opportunity by synchronizing the opportunity with an active transaction. Once synchronized, the properly validated and priced quote line items are updated on the opportunity to ensure accurate forecasts.
- Forecast revenues for one time, recurring, and usage-type pricing.

These use cases describe features that are a core part of the integration. Many other processes and capabilities are available to users in each application.

For details about using CPQ in Oracle Sales, start with *Overview of Using Quotes* in the Using Sales guide.

How the Applications Synchronize Data

The applications synchronize data between Oracle Sales and Oracle CPQ using REST and SOAP web services. This is a "point-to-point" integration that doesn't rely on middleware, such as an enterprise service bus or cloud integration application.

Here are the data synchronization tasks typical in this integration:

- The application imports Opportunity details onto the transaction in Oracle CPQ when a new quote is created. This information can include deal information, sales stage, and owner, all of which can be useful in quoting.
- The application imports Account details onto the transaction in Oracle CPQ when a new quote is created. This can include details about the buyer that can be important for pricing and order fulfillment, such as company name, shipping and billing address, and industry.
- The application exports Quote details from the transaction in Oracle CPQ to the Sales Quotes and Orders object when a user completes edits. This information typically includes summary information about the sales transaction like pricing rollups, approval status, and order info.
- The application exports Quote Line details from the transaction in Oracle CPQ to the Sales Quote Line Items object when a user completes edits. This typically includes product information, quantities, discounts and list, and net prices.
- The application exports Quote Line items from the transaction in Oracle CPQ to the Opportunity's revenue lines when the user updates the opportunity. This includes product information, quantities, discounts and list, and net prices.

These data integrations are included in the Oracle CPQ Reference Application provisioned for each new customer. This simplifies the setup for administrators and provides a set of preconfigured integrations for common tasks. The integration is extensible, and additional business objects can be imported or exported as required for your business processes.

3 Plan Your Implementation

Overview of Planning Your Implementation

You must consider several options when planning your implementation.

These options include:

- Selecting a source for the products you're going to be using. See *Choose a Product Source*
- Determining how to model your products and prices. See *Model Your Products and Prices*
- Deciding whether to use Quote Line Sync or Revenue Reconciliation Sync. See *Quote Line Sync vs Revenue Reconciliation Sync*
- Setting which line types get synced in the integration, for example, root lines or part lines. See *Options for Quote Line Type Sync*
- Determine which user authentication solution to use. See *Determine User Authentication Solution*
- Optionally use Rollups to include pricing at the model level and summarize the prices of all of a model's children. See *Use Rollup Attributes*

Choose a Product Source

Before you can successfully synchronize lines between Oracle CPQ and Sales, you must ensure that product data exists in both systems.

Ensuring that product data exists in both systems is typically done through product synchronization on a periodic basis.

The first decision to make is deciding which application will act as your product source.

The Oracle Product Hub module of Oracle Fusion Supply Chain Management (SCM) Product Information Management (PIM) comes provisioned and fully integrated with Sales. Products must exist in this module before they can be added as either quote lines or revenue lines. Oracle CPQ includes its own Parts module, which also must be populated with products before quote lines can be created. Products are referred to as "parts" in Oracle CPQ and as "items" in Oracle Product Hub.

There are two common approaches for synchronizing products:

- Oracle CPQ Parts is the product source, where parts are pushed into Oracle Product Hub.
- Oracle Product Hub is the product source, where items are pulled into Oracle CPQ Parts.

Regardless of which application you use as the product source, new and updated products are pulled or pushed from Oracle CPQ to the product hub. The integration is managed inside Oracle CPQ for both scenarios.

Your choice of product source dictates how you manage the Part Integration settings in Oracle CPQ. Additionally, you should inform Oracle CPQ customer support, using My Oracle Support, of your decision, so they can configure your site as needed.

Note: You can use a different application as the product source, such as an ERP application or other legacy solution, and choose to push updates directly to the product hub and Oracle CPQ independently.

Related Topics

- Set Up and Run the Parts Integration

Model Your Products and Prices

After your products are defined, consider how those products should be priced and quoted. Oracle CPQ manages quote lines as part of a hierarchy.

Within the Oracle CPQ quote lines hierarchy, there are two different line types that are grouped into these categories:

Item Type	Model	Part
Root Line	Line types for modeling products and prices	Standalone parts
No Root Line	No-root (child) model lines (when using System Configuration)	Parts that are children of a mode

Root lines are quote lines that have no parent in the quote line hierarchy -- they're the highest-level grouping. Root lines can exist by themselves with no children, or they can have children.

- **Standalone part**: When a root line has no children, it is a standalone part. It's not part of a model hierarchy.
- **Model**: When a root line has children, it is a model. Models can have either parts or models as children.
  - Parts never have children.
  - Child models extend the hierarchy as part of a more complex system.

You can manage the pricing on models and parts in a variety of ways. How products and prices are modeled in Oracle CPQ is a key factor in deciding which sync and reconciliation options to select. Let's look at some examples of different product and price modeling:

- **Simple products** (Oracle CPQ standalone parts), each with a single price
- **Complex products** (Oracle CPQ models), where the model line doesn't have its own price, but each child line has a price
- **Complex products** (Oracle CPQ models), where the model line has a price that summarizes all of the model's child lines
- **Complex products** (Oracle CPQ models) where the model and its child lines all have a price

To ensure that sales forecasts and reports reflect the correct revenue amounts, you must understand which lines contain pricing information that need to be synchronized. The implementor must also balance this against performance considerations, taking care not to synchronize more information than required.

Options for Quote Line Type Sync

Oracle CPQ provides three options for syncing quote lines into Sales.

This setting governs which Oracle CPQ quote lines are synced to Sales quote lines:

- **All Lines**: Syncs all quote lines into Sales. This is the default setting.
- **Part Lines**: Syncs only part-type lines into Sales. Model lines are not synced.
- **Root Lines**: Syncs only top-level model and standalone part lines into Sales. Child models and child parts are not synced.

Sales provides two options for revenue reconciliation. This setting governs which quote lines (that have been synced to Sales) are used to update opportunity revenue lines:

- **Parts (Part)**: Only sync quote lines with the item type of Part.
- **Roots (Root)**: Only sync quotes lines for root models or standalone parts.

To ensure the best results, you should define these settings in combination. Consider the Sales revenue reconciliation options described in this table:

		Sales Revenue Reconciliation Options	
		Part	**Root**
CPQ Sync Option	**All Lines**	View all lines, including models, in Workspace, but reconcile only part lines to revenue. Appropriate if models don't have pricing in Oracle CPQ.	View all lines, including models, in Workspace, but reconcile only standalone part and root model lines with their rolled-up revenues to revenue. Appropriate if models and parts both have pricing in Oracle CPQ, but you want to see a summary of revenue in opportunities.
	Part Lines	View only part lines in Workspace and reconcile all part lines to opportunity revenue lines. Appropriate if models don't have pricing in Oracle CPQ and are merely containers or bundles. Model lines aren't searchable in Workspace.	Not an appropriate combination of options. Only part lines are visible in Workspace, and only standalone part lines are reconciled to opportunity revenue lines. This omits child parts from forecasts.
	Root Lines	Not an appropriate combination of options. Only model and standalone part lines are visible in Workspace, and only standalone part lines are reconciled to opportunity revenue lines. This omits models from forecasts.	View only model and standalone part lines in Workspace and reconcile these lines and their rolled-up revenue to revenue. Appropriate if models and parts both have pricing in Oracle CPQ. This option may enhance performance by reducing the volume of records that are synced to Sales.

Related Topics

- Set Up the Export Lines Integration
- Oracle CPQ Configuration Steps
- Quote Headers and Opportunity Attributes Mapping

Quote Line Sync vs Revenue Reconciliation Sync

You can determine how data in Oracle CPQ synchronizes with data in Oracle Sales, based on what's best for your organization.

Sales and Oracle CPQ manage several related business objects. Two pairs of these objects, Opportunities and Revenue Lines and Quotes and Quote Lines (sometimes referred to as Sales Orders and Sales Order Lines) are closely related, but not always identical. You need to decide how data between these two pairs of objects is synchronized and how the objects are consumed upstream.

For example, sales opportunities and their revenue lines are used to forecast anticipated revenue for a deal. Because revenue lines are created early in the sales cycle, they may be defined at a product group level (a category of products) as opposed to a specific product. In contrast, quotes and quote lines managed in Oracle CPQ must always be defined with a specific product.

Consider the following options:

- **Quote Line Sync**: Lines are synced from Oracle CPQ to Sales. Synchronizing quote lines lets users use Oracle Workspace search and report on quote lines in conjunction with quotes, opportunities, and accounts.
- **Revenue Reconciliation**: Quote lines are synced with revenue lines when a quote is marked as active. This supports one-time, recurring, and usage revenue types on lines. This also lets sales users set individual quotes as “active” in Sales, which triggers the synchronization event.

With these two options, you can enable users to search and view revenue lines at two different levels of detail. For example, users can search on quote line details while viewing only summary information on revenue lines.

Carefully consider which option best meets your business needs before enabling either of the options. Switching between these options can impact quote line and revenue line data.

Determine User Authentication Solution

Before you integrate Oracle Sales and Oracle CPQ, determine whether you want to use SAML or OpenID Connect single sign-on (SSO) for your user authentication solution.

Integrate with SAML SSO

Security Assertion Markup Language (SAML) is an open federation standard that allows an identity provider (IdP) to authenticate users and then pass an authentication token to another application known as a service provider (SP). SAML enables the SP to operate without having to perform its own authentication and to pass the identity to integrate internal and external users.

Integrate with OpenID Connect SSO

As an alternative setup to SAML SSO, you can integrate Sales with OpenID Connect (OIDC), so that you can use single sign-on with Oracle Identity and Access Management (IAM)'s Identity Domains (formerly IDCS).

OIDC is an extension of the existing OAuth Provider configuration available for use with IAM's Identity Domains. OIDC adds an identity layer to OAuth 2.0 that enables a federated SSO solution between Oracle and custom applications configured in IAM.

Complete the Integration

You can find the Sales-specific steps for the integration in the topic, *Create the Integration URLs*.

See *Construct the URL Strings* for information about how to construct the URLs needed in the integration.

Use Rollup Attributes

Use rollup attributes in Oracle CPQ to include pricing at the model level and summarize the prices of all of a model's children. Rollup attributes summarize the prices, and those values are synchronized to Sales for use in Workspace and Forecasts.

For root model lines, rollup attributes provide aggregated prices and revenue values for key price types and periodicities. For non-root model lines (including child model lines and all part lines), rollup attributes contain individual prices and revenue amounts for that part or model line only. These rollup values are used to update or *reconcile* aggregate price and revenue data on opportunity revenue lines. This allows revenue lines to display accurate rollups of root model revenues when **Root** is selected for Revenue Reconciliation Option.

These rollup attributes, calculations, and integrations are included in the Oracle CPQ Reference Application provisioned for new customers. You can also create your own rollups.

See *Commerce Integrations* for more information.

Related Topics

- Work with Rollups

4 Oracle Sales Configuration

Oracle Sales Configuration Steps

Oracle Sales lets salespeople create and manage quotes from accounts and opportunities. Salespeople can also mark individual quotes on an opportunity as active, which then synchronizes quote lines with revenue lines.

Note: Your Oracle Sales site can only be implemented with a single Oracle CPQ instance.

Here are the high-level integration steps:

1. *Set Up Revenue Reconciliation*
2. *Show Price Type on Revenue Lines*
3. *Get Parameter Values*
4. *Configure the Integration URLs*

Initial Sales Configuration

Set Up Revenue Reconciliation

Users can mark individual quotes that are part of an opportunity as “active” from the Quotes and Orders tab in Sales. Activating a quote triggers a revenue reconciliation event that synchronizes the quote lines on the selected quote with the revenue lines on the parent opportunity.

To allow your users to activate a quote from Sales and thereby trigger the reconciliation of revenue lines from the quote lines, follow these steps:

1. Enable the profile option, ORA_MOO_REVN_RECONCILE_FROM_SO.
2. Set the reconcile option for quote lines to Root or Part.
3. Optionally, review the opportunity lock time during the reconciliation process.

Enable the Profile Option

1. In the Setup and Maintenance work area, search for and select the Manage Administrator Profile Values task.
2. Search for the profile option code, ORA_MOO_REVN_RECONCILE_FROM_SO. The default value of Site is set to No.
3. Change the profile value to Yes and save the changes.
4. Sign in again for the changes to take effect.

Set the Reconcile Option for Quote Lines Once for All

Typically, you have two kinds of reconcile options for the quote lines: Root and Part. Decide which option suits your needs. See *Plan Your Implementation*.

Note: Once decided, don’t change your reconcile option. If you change it, you lose all of the previous data.

1. Navigate to **Setup and Maintenance** and search for the **Manage Oracle CX Sales to Oracle CPQ Cloud Integration** task.
2. Under the Revenue Reconcile Option column, select **Root** or **Part**.
3. Save and close the task.
4. Sign in again for the changes to take effect.

Optional: Review Opportunity Lock During Reconciliation

When a user selects a quote as active, the sales application triggers the reconciliation of revenue lines from quote lines. During this time, the opportunity is locked, so that the user doesn't accidentally change anything. By default, this lock is set for 120 seconds. If the reconciliation process takes longer than 120 seconds, then the lock continues for the next 120 seconds, and so on, until the reconciliation process ends.

The ORA_MOO_OPTY_LOCK_RELEASE profile option controls this lock time. Here are the steps to change the default time:

1. Navigate to **Setup and Maintenance** and search for the **Manage Administrator Profile Values** task.
2. Search for the profile option code, ORA_MOO_OPTY_LOCK_RELEASE. The default value of Site is set to 120.
3. Enter a new value at the site level and save the changes.
4. Sign in again for the change to take effect.

Show Price Type on Revenue Lines

Quote line items can take three price types: one-time, recurring, and usage-based. Administrators must enable the display of these price types on revenue lines.

Displaying price types lets users differentiate between the types after they have been synchronized with the opportunity.

To show the price type on the revenue lines:

1. Enable the profile option, ORA_MOO_REVN_RECUR_PRICETYPE
2. Add the Price Type field to the Opportunity Revenue Line and Recurring Schedule pages through Application Composer.

Enable the Profile Option

1. In the Setup and Maintenance work area, search for and select the Manage Administrator Profile Values task.
2. Search for the profile option code, ORA_MOO_REVN_RECUR_PRICETYPE. The default value of Site is set to No.
3. Change the profile value of Site to **Yes** and save the changes.
4. Sign in again for the change to take effect.

Add the Price Type Field to Opportunity Pages

1. Enter a sandbox with Application Composer enabled.
2. Go to **Configuration** > **Application Composer** > **Standard Objects** > **Opportunity** > **Pages** > **Details Page Layouts**.
3. Click the edit icon beside Edit Revenue Table of a Detail page layout.
4. Move **Price Type** from Selected Fields to Available Fields.
5. Save and close the page layout.
6. Publish your changes.

Get Parameter Values

Overview of Getting Parameter Values

Before you can configure the integration in Sales, you must gather a few environment details and parameter values. The application needs the parameters to configure the URLs stored in Sales that launch the embedded Oracle CPQ pages.

Here are the high-level steps:

1. *Get the Parameters from the View Parameters Page*
2. *Get the Version Action ID*

Get these parameter values from Oracle CPQ:

- Commerce Process Id (bm_cm_process_id) for your commerce process
- Document_id for the quote header
- Action_id for the New Version Quote action
- Action_id for the Edit Quote action
- Action_id for the Copy Quote action
- Version_id for the commerce process
- Commerce Process Name
- CPQ Site URL

Get the Parameters from the View Parameters Page

You can get most of the parameters required to configure the UI integration from the View Parameters page in Oracle CPQ:

1. Go to **Administration Platform Commerce and Documents Process Definition**.
2. Select **Integrations** from the Navigation drop-down list for a process.
3. Click **List**. The Integrations page appears.
4. Click **View Parameters**.

Here are the parameters, where they're located, and example IDs:

ID Name	Located Under Comment	Example
Commerce Process ID	//copy specific values	process_id="36244034"
Copy Quote Action ID	//copy specific values	action_id_copy="36244038"
Edit Action ID	//copy specific values	action_id_open="36244076"
Document ID	//copy specific values	document_id="36244074"

ID Name	Located Under Comment	Example
Version ID for the commerce process	//version ID for copy	version_id="36282431"
Process Name	//create specific values	process="oraclecpqo"
CPQ Site URL	//initialize url variables	url = "https://mycpqsite.bigmachines.com/commerce/buyside/"

Get the Version Action ID

You need one additional parameter. Version Action ID, for the Create new version of the quote URL.

Here are the steps to get that from Oracle CPQ:

1. Go to **Administration Platform Commerce and Documents Process Definition**.
2. Ensure **Documents** is selected in the Navigation list and click **List**.
3. In the Document List page that appears, select **Actions** in the Navigation list for the **Transaction** document. Click **List**.
4. The Action List page appears for the Transaction main document. Click the **Version Transaction** link.
5. In the Administrator Action page that appears, record the Version Action ID displayed in the browser's URL. This ID is located immediately after the `edit_action.jsp?` in the URL. Record the numbers after `id=`. For example, `edit_action.jsp?id=36269741`.

Configure the Integration URLs

Overview of Configuring the Integration URLs

Now that you have the necessary parameters, you can configure the integration URLs for Oracle CPQ.

Here are the high-level steps:

1. *Construct the URL strings*
2. *Create the integration URLs*

Before creating the URL strings, review this table to understand which Oracle CPQ parameters go with which integration URL.

Parameter	URL Where the Parameter Is Used
Commerce Process ID	Edit the quote
Document ID	Edit the quote Copy the quote

Parameter	URL Where the Parameter Is Used
Edit Action ID	Edit the quote
Copy Action ID	Copy the quote
Version Action ID	Create new version of the quote
Commerce Process Version ID	Copy the quote
Process Name	Create the quote

Construct the URL Strings

Once you have the parameter ID values for Oracle CPQ, you can construct the URL strings. This section provides the base strings you can use to construct the end point URLs that launch embedded Oracle CPQ pages with SAML and OpenID Connect SSO.

When using the URLs, copy the base strings to a text editor, add parameters, and replace the portion of each of the following end points with the parameter values in Oracle CPQ. Paste the edited URLs into the Value field. See *Create the Integration URLs*.

> **Note:** When you copy-paste the URL constructions, remove any leading or trailing spaces. The application integration can fail with extra spaces.

The following sections show you how to construct the URLs.

On completion, you need to have just one integration created, because the integration currently only supports a single sales order instance.

How to Construct the SAML SSO URLs

Here's how to construct the SAML SSO URLs:

Action: Create the quote

URL String Format:

#{'/sso/saml_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion
%26formaction=create%26process=**{process}**%26search_id=-1%26_bm_cm_new_transaction_currency='
+ (osc_param_CurrencyCode ?: '') + '%26_partnerOpportunityId=' + (osc_param_OptyId ?: '') +
'%26_partnerOpportunityNumber=' + (osc_param_OptyNumber ?: '') + '%26_partnerAccountId=' +
(osc_param_AccountId ?: '')}

URL String Example:

#{'/sso/saml_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion
%26formaction=create%26process=**oraclecpqo**%26search_id=-1%26_bm_cm_new_transaction_currency='
+ (osc_param_CurrencyCode ?: '') + '%26_partnerOpportunityId=' + (osc_param_OptyId ?: '') +

'%26_partnerOpportunityNumber=' + (osc_param_OptyNumber ?: '') + '%26_partnerAccountId=' + (osc_param_AccountId ?: '')}

Action: Edit the quote

URL String Format:

#{'/sso/saml_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26formaction=performAction%26action_id=**{action_id_open}**%26document_id=**{document_id}**%26bs_id=' +osc_quote_ExternalReferenceNumber+'%26bm_cm_process_id=**{process_id}**'}

URL String Example:

#{'/sso/saml_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26formaction=performAction%26action_id=**36244076**%26document_id=**36244074**%26bs_id=' +osc_quote_ExternalReferenceNumber+'%26bm_cm_process_id=**36244034'**}

Action: Create the quote

URL String Format:

#{'/sso/saml_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26formaction=create%26process=**{process}**%26search_id=-1%26_bm_cm_new_transaction_currency=' + (osc_param_CurrencyCode ?: '') + '%26_partnerOpportunityId=' + (osc_param_OptyId ?: '') + '%26_partnerOpportunityNumber=' + (osc_param_OptyNumber ?: '') + '%26_partnerAccountId=' + (osc_param_AccountId ?: '')}

URL String Example:

#{'/sso/saml_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26formaction=create%26process=**oraclecpqo**%26search_id=-1%26_bm_cm_new_transaction_currency=' + (osc_param_CurrencyCode ?: '') + '%26_partnerOpportunityId=' + (osc_param_OptyId ?: '') + '%26_partnerOpportunityNumber=' + (osc_param_OptyNumber ?: '') + '%26_partnerAccountId=' + (osc_param_AccountId ?: '')}

Action: Copy the quote

URL String Format:

#{'/sso/saml_request.jsp?RelayState=/commerce/buyside/copy_processing.jsp?_partnerIdentifier=fusion%26action_id=**{action_id_copy}**%26version_id=**{action_id_version}**%26bs_id=' + osc_quote_ExternalReferenceNumber + '%26document_id=**{document_id}**'}

URL String Example:

#{'/sso/saml_request.jsp?RelayState=/commerce/buyside/copy_processing.jsp?_partnerIdentifier=fusion%26action_id=**36244038**%26version_id=**36282630**%26bs_id=' + osc_quote_ExternalReferenceNumber + '%26document_id=**36244074'**}

Action: Create new version of the quote

URL String Format:

#{'/sso/saml_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26process=**{process}**%26formaction=version%26action_id=**{action_id_version}**%26bs_id=' + osc_quote_ExternalReferenceNumber}

URL String Example:

#{'/sso/saml_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26process=**oraclecpqo**%26formaction=version%26action_id=**36269741**%26bs_id=' + osc_quote_ExternalReferenceNumber}

Action: Get the proposal for the quote

URL String Format:

#{'/sso/saml_request.jsp?RelayState=/rest/v10/commerceProcesses/**{process}**/transactions/' +osc_quote_ExternalReferenceNumber+ '/attachments/oRCL_OSC_FileAttachment_t'}

URL String Example:

#{'/sso/saml_request.jsp?RelayState=/rest/v10/commerceProcesses/**oraclecpqo**/transactions/' +osc_quote_ExternalReferenceNumber + '/attachments/oRCL_OSC_FileAttachment_t'}

How to Construct the OpenID Connect URLs

Here's how to construct the OpenID Connect URLs:

Action: Create the quote

URL String Format:

#{'/sso/openid_connect_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26formaction=create%26process=**{process}**%26search_id=-1%26_bm_cm_new_transaction_currency=' + (osc_param_CurrencyCode ?: '') + '%26_partnerOpportunityId=' + (osc_param_OptyId ?: '') + '%26_partnerOpportunityNumber=' + (osc_param_OptyNumber ?: '') + '%26_partnerAccountId=' + (osc_param_AccountId ?: '')}

URL String Example:

#{'/sso/openid_connect_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26formaction=create%26process=**oraclecpqo**%26search_id=-1%26_bm_cm_new_transaction_currency=' + (osc_param_CurrencyCode ?: '') + '%26_partnerOpportunityId=' + (osc_param_OptyId ?: '') + '%26_partnerOpportunityNumber=' + (osc_param_OptyNumber ?: '') + '%26_partnerAccountId=' + (osc_param_AccountId ?: '')}

Action: Edit the quote

URL String Format:

#{'/sso/openid_connect_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26formaction=performAction%26action_id=**{action_id_open}**%26document_id=**{document_id}**%26bs_id=' +osc_quote_ExternalReferenceNumber+'%26bm_cm_process_id=**{process_id}**'}

URL String Example:

#{'/sso/openid_connect_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26formaction=performAction%26action_id=**36244076**%26document_id=**36244074**%26bs_id=' +osc_quote_ExternalReferenceNumber+'%26bm_cm_process_id=**36244034'**}

Action: Create the quote

URL String Format:

#{'/sso/openid_connect_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26formaction=create%26process=**{process}**%26search_id=-1%26_bm_cm_new_transaction_currency=' + (osc_param_CurrencyCode ?: '') + '%26_partnerOpportunityId=' + (osc_param_OptyId ?: '') +

'%26_partnerOpportunityNumber=' + (osc_param_OptyNumber ?: '') + '%26_partnerAccountId=' + (osc_param_AccountId ?: '')}

URL String Example:

#{'/sso/openid_connect_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26formaction=create%26process=**oraclecpqo**%26search_id=-1%26_bm_cm_new_transaction_currency=' + (osc_param_CurrencyCode ?: '') + '%26_partnerOpportunityId=' + (osc_param_OptyId ?: '') + '%26_partnerOpportunityNumber=' + (osc_param_OptyNumber ?: '') + '%26_partnerAccountId=' + (osc_param_AccountId ?: '')}

Action: Copy the quote

URL String Format:

#{'/sso/openid_connect_request.jsp?RelayState=/commerce/buyside/copy_processing.jsp?_partnerIdentifier=fusion%26action_id=**{action_id_copy}**%26version_id=**{action_id_version}**%26bs_id=' + osc_quote_ExternalReferenceNumber + '%26document_id=**{document_id}**'}

URL String Example:

#{'/sso/openid_connect_request.jsp?RelayState=/commerce/buyside/copy_processing.jsp?_partnerIdentifier=fusion%26action_id=**36244038**%26version_id=**36282630**%26bs_id=' + osc_quote_ExternalReferenceNumber + '%26document_id=**36244074**'}

Action: Create new version of the quote

URL String Format:

#{'/sso/openid_connect_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26process=**{process}**%26formaction=version%26action_id=**{action_id_version}**%26bs_id=' + osc_quote_ExternalReferenceNumber}

URL String Example:

#{'/sso/openid_connect_request.jsp?RelayState=/commerce/buyside/document.jsp?_partnerIdentifier=fusion%26process=**oraclecpqo**%26formaction=version%26action_id=**36269741**%26bs_id=' + osc_quote_ExternalReferenceNumber}

Action: Get the proposal for the quote

URL String Format:

#{'/sso/openid_connect_request.jsp?RelayState=/rest/v10/commerceProcesses/**{process}**/transactions/' +osc_quote_ExternalReferenceNumber+ '/attachments/oRCL_OSC_FileAttachment_t'}

URL String Example:

#{'/sso/openid_connect_request.jsp?RelayState=/rest/v10/commerceProcesses/**oraclecpqo**/transactions/' +osc_quote_ExternalReferenceNumber + '/attachments/oRCL_OSC_FileAttachment_t'}

Create the Integration URLs

Oracle Sales uses the integration URLs in Setup and Maintenance to launch the embedded Oracle CPQ pages and the Get Proposal service.

1. Sign into Sales as a user with the Sales Administrator role.

2. In the Setup and Maintenance work area, go to:
    - Offering: Sales (click the drop-down list next to Setup: and select **Sales**)
    - Functional Area: Integrations
    - Task: Manage Oracle CX Sales to Oracle CPQ Cloud Integration
3. In the Manage Oracle CX Sales to Oracle CPQ Cloud Integration page, create a Sales Order Instance to integrate with. To create one, click the plus icon under the Sales Order Instance section, and enter these details in the new row that's added:

    > **Note:** A "Sales Order Instance" is the Oracle CPQ site that Sales is integrating with. This one row in this administrator page is equal to one Oracle CPQ site.

    - **Reference Code**: Enter a short reference code name for the Oracle CPQ site.
    - **Name**: Give a name to the integration.
    - **Description**: Enter details about the integration.
    - **End Point URL**: Enter the CPQ Site URL for the paired Oracle CPQ site. Use only the base URL, not the full path retrieved from the View Parameters page.
    - **Process Name**: Enter the name of the Oracle CPQ Commerce Process being integrated. An example is "oraclecpqo" for the process. Note that this is the exact value that's used in the Oracle CPQ reference application.
    - **Document Name**: Enter the variable name for the Oracle CPQ Commerce Process' Main Document. An example is "transaction" for the main document. Note that this is the exact value used in the Oracle CPQ reference application.
    - **REST Framework Version**: Enter the REST API version supported by Oracle CPQ.
    - **Active**: Select the check box to indicate this instance is active.
    - **Restrict Revenue Edit:** This check box controls the fields that are editable when an opportunity has already been quoted. After an opportunity has been quoted, the fields you select here become read-only. Move the fields you want to be read-only to the read-only window.
4. Save your changes.
5. Enter a parameter end point URL for each of the actions in Sales that deploy these embedded Oracle CPQ pages:

    - Create Quote
    - Edit Quote
    - Copy Quote
    - Create a Version
    - Get Proposal

    To add these end point URLs, click the plus icon in the Parameters section to create a row for each action, and then add these details:

    - **Name**: Enter a name for the end point parameter. You can enter the names of the actions these URLs are meant for. For example, you can name the parameter that's meant to launch the Create Quote page, as "Launch Create Quote page".
    - **Value**: Enter a URL string for each of the five predefined actions in the integration. See *Construct the URL Strings*. You can use the base strings provided in that section, edit it in a text editor to replace with the required Oracle CPQ parameter, and then paste the edited URL value for that action. Ensure that you don't copy-paste any leading or trailing spaces into this field.

6. Click **Save** to save the integration setup.

Additional Configurations

Update Opportunity Status Based on Quote Status

The applications can automatically update the status of an opportunity based on the status of an active, associated quote in Oracle CPQ.

This capability means salespeople don't need to manually update the opportunity status when the associated quote status changes. For example, if a quote is won, then the opportunity status automatically changes to won.

Configuration Steps

There are a few changes required to achieve this setup:

1. Ensure that the profile option, Close Opportunity Win/Loss Reason Required (MOO_CLOSE_WINLOSS_REQD), is set to No.
2. Ensure that the profile option, Close Opportunity Competitor Required (MOO_CLOSE_COMP_REQD), is set to No.
3. Enable the functionality by setting the profile option, Opportunity Status Automatically Updated (ORA_MOO_AUTO_UPDATE_OPPTY_STATUS), to Yes.
4. Ensure that the display sequences across all status codes set up in the Manage Sales Status task are unique. This display sequence is used to select the right opportunity status as part of automatic update. For more information about sales statuses, see *How do I modify sales statuses?*.

Set or Verify the Profile Options

Here's how to set or verify the profile options.

1. In the Setup and Maintenance work area, go to the following:
    - Offering: Sales
    - Functional Area: Opportunities
    - Task: Manage Opportunity Profile Options
2. In the search region of the Manage Opportunity Profile Options page, enter the profile option name in the Profile Display Name field.
3. Click **Search**.
4. In the list that's returned, click on the profile option name link.
5. Set the profile option value as needed.

Points to Note

Here are some things to keep in mind about this feature:

- The applications use the opportunity close reason statuses of Won, Lost, and In Progress in the integration with Oracle CPQ. These statuses are defined in the ORA_ZCA_WIN_STATUS (Aggregate Status of Quote or Sales Order) lookup. No other statuses are considered as part of the automatic update.

- Custom sales stage values for the close opportunity reason aren't supported. If you use custom status values, the applications won't update the opportunity automatically and an error message displays.

5 Oracle CPQ Configuration

Oracle CPQ Configuration Steps

Oracle CPQ supports a point-to-point integration with Oracle Sales. Each integration performs a specific task associated with a specific action. Typically, each customer environment is provisioned in a preconfigured state.

Here are the high-level integration steps:

1. *Configure the integration user*
2. *Configure the New Transaction action*
3. *Configure the Open Transaction action*
4. *Configure the Update Sales action*
5. *Configure navigation*
6. *Deploy your changes*

Note: Not all integrations are REST-based. For example, the Account and Parts integrations are SOAP-based. Some SOAP and REST integrations can be combined in an overall integration, but not SOAP and BML integrations.

Configure the Integration User

Overview of Configuring the Integration User

Oracle CPQ makes web service calls to Oracle Sales when importing or exporting data. An integration user performs these integrations, since that user can authenticate with Sales and has access to this data. This section describes how to choose and configure that user.

You need to:

1. *Identify the Integration User*
2. *Enter the Integration User Credentials*

Identify the Integration User

You need to identify a specific user account in Oracle Sales and add that user's credentials to the superuser account in Oracle CPQ. The user you select must be a sales resource and be an administrator.

You can make a copy of the predefined Sales Administrator role and use that for the mapping if you want.

Enter the Integration User Credentials

Here's how you enter the Oracle Sales (CRM) integration user credentials:

1. Sign into Oracle CPQ as a superuser.
2. Go to **Administration Platform** > **Integration Platform** > **Integration Center**.
3. Open the **CRM tab** from the sidebar. If no integration exists already for Fusion under CRM, then create one by linking to the Fusion connector. If one already exists, then skip to step 4.
4. Enter the sign in information and password for the previously identified Sales user in the Customer Relationship Management credentials page.
5. Click **Save**.

Configure Product Hub User Credentials

1. Sign into Oracle CPQ as a superuser.
2. Go to **My Profile** > **User Integration**. The Partner Info page appears with the PIM tab.
3. In the PIM tab, enter credentials for the integration user that will be used to sync products to the Product Hub.

Configure the New Transaction Action

Overview of the New Transaction Action

The New Transaction is a process action that runs every time a new quote is created. Typically, when a new quote is created, the application imports the deal information from the associated Opportunity and the customer information from the Account.

Configuring this action is a multi-step process:

1. *Set Up the Opportunity Import Integration*
2. *Set Up the New Transaction Action*
3. *Set up the Accounts Import Integration*
4. *Set Up the Accounts Auto-Fill Action*

> **Note:** These steps assume that your Oracle CPQ site is provisioned with the Oracle Sales Reference Application, or that you have used the provided migration package to import the artifacts referenced below later in this chapter. If you're missing any of these predefined objects, contact Oracle Support for guidance.

Set Up the Opportunity Import Integration

The Opportunity Import integration calls the Oracle Sales REST Opportunity service to get details for the opportunity. These details are then saved on the transaction.

Here are the steps to set up the Opportunity Import:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. From the Navigation list for a commerce process, select **Integrations**, and click **List**.

3. If your Oracle CPQ site was provisioned with the Oracle Sales Reference Application, you should find an Opportunity Import integration already defined. Click the link for **OSC Opp Import** or a similar link.
4. Review or update the fields in the Integration Information region:
   - **Name**: The name for the integration.
   - **Variable Name**: A unique identifier for the integration.

     > **CAUTION:** You can't change the Variable Name after creating this integration.

   - **Description**: The description of this integration.
   - **Timeout**: If you don't enter a value, the application defaults to `12000` milliseconds.
   - **ID field**: This points to the attribute that stores the Opportunity identifier on the transaction; typically, this is `transaction.opportunityNumber_t`.

     > **Note:** There is a similar setting on the Commerce Main Doc (Transaction) Admin Page called `Opportunity Id Mapping` that takes precedence over this setting in the integration admin. Be sure to either blank out the Main Doc setting or ALSO change that value to `transaction.opportunityNumber_t`.

5. Complete the fields in the End Points section.
   - **Metadata URL**: Enter the endpoint to retrieve the metadata about the Sales attributes available for mapping in this integration. For the standard opportunity import integration, the value is: `/crmRestApi/resources/11.13.18.05/opportunities/describe`.
   - **Integration URL**: Enter the endpoint that gets the import opportunity request. For example: `/crmRestApi/resources/11.13.18.05/opportunities/{optyNumber}` where `{optyNumber}` is the placeholder for the opportunity number to be used for import.
   - **Integration Request Headers**: These are the headers to be passed in the request to the integration endpoint. Header parameters are not required for this integration.
6. Review the Response Mapping for the REST integration by clicking the **Edit** button. These mappings show the Opportunity fields that are pulled into CPQ.

   In preconfigured sites, a set of standard fields are mapped; see *Opportunity Import Attribute Mappings*. To include custom fields, you must modify the attribute map accordingly. See *Edit Attribute Mappings*.

   > **Note:** When you save your edits, the Attribute Mapping page validates your mappings to ensure that there are compatible data types.

7. Click **Update**.
8. Deploy the changes. See: *Deploy your changes*.

Opportunity Import Attribute Mappings

The standard attribute mappings for the Opportunity Import integration are:

Sales Attribute Display Name	Sales Attribute Variable Name	CPQ Attribute Name	CPQ Variable Name (Type)
Name	Name	Opportunity Name	opportunityName_t (text)
Opportunity ID	OptyId	Opportunity ID	opportunityID_t (text)
Owner	OwnerResourcePartyId	OSC Owner Resource Party ID	oRCL_OSC_ OwnerResourcePartyID_t (text)

Sales Attribute Display Name	Sales Attribute Variable Name	CPQ Attribute Name	CPQ Variable Name (Type)
Business Unit ID	PrimaryOrganizationId	OSC Primary Org ID	oRCL_OSC_PrimaryOrgID_t (text)

Set Up the New Transaction Action

After you set up the Opportunity Import integration, next, you must configure the New Transaction action to execute this integration when it runs. Integrations for the New Transaction action are set up in the Process Administration page.

Here's how to set up the New Transaction action:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. Click the name of the target commerce process.
3. Click the **Integration** tab.
4. Review the Available and Selected Imports and verify that this integration is selected:
    - **OSC – REST Import Opportunity**: This integration imports the Opportunity details and populates the corresponding attribute values on the Transaction.
5. Click **Update**.
6. Deploy the changes. See: *Deploy your changes*.

Set Up the Accounts Import Integration

The Accounts Import integration calls the Sales Accounts service to get details for the account that are then saved on the transaction.

Here's how to set up the Accounts Import integration:

1. Go to **Administration Platform** > **Integration Platform** > **Accounts** > **Integration**.
2. If your Oracle CPQ site is provisioned with the Oracle Sales Reference Application, you may find an Accounts Import integration already defined. Click the link for **OSC Account Import** or a similar link. If your site doesn't have an integration predefined, you must create one manually. Contact Oracle Support for guidance.
3. Validate that the **ID field** property points to the attribute that stores the Account ID on the transaction; typically, this is `_customer_id`.
4. Review the **SOAP Generator XSL** by clicking **Display File**. This file is used to modify the SOAP request that retrieves the Account data. Don't make any changes in preconfigured sites.
5. Review the **Result Parser XSL** by clicking **Display File**. This file is used to extract the data from the SOAP response and map it to Oracle CPQ Account attributes. In preconfigured sites, a set of standard fields are mapped; see *Account Import Attribute Mappings*. To include custom fields, you must modify the result parser accordingly.
6. Enter the **End Point URL** for the Accounts service. This includes the host name for your Sales environment and the Accounts service end point. The Accounts service end point is `crmCommonSalesParties/AccountService`

    .

    Example: `https://efops-rel90-patchtest-external-crm.oracle.com/crmService/SalesAccountsService"`

> **Note:** Based on your environment, you may need to change the predefined endpoint URL.

7. Click **Update**.

Note: If you experience issues with the integration files, enter a sample Transaction ID then click **Preview SOAP XML** to view the XML result. Each XSL file includes comments to help you modify these files according to your needs. Open these files in any text editor, make changes, save, and re-upload to Oracle CPQ.

Account Import Attribute Mappings

The Result Parser XSL for the Accounts Import integration contains these mappings:

Payload Type	Sales Accounts Service Attribute Name	Oracle CPQ Attribute Display Name	Oracle CPQ Variable Name
Input	PartyId (for the SoldCustomerParty)	Customer Id	_customerID_t This attribute is mapped internally to Oracle CPQ to Account ID.
Output	PartyId	N/A	AccountId
Output	PartyId	Customer Id	customer_id
Output	PartyUniqueName	Customer Company Name	company_name
Output	AddressLine1	Customer Address	AddressLine1
Output	AddressLine2	Customer Address 2	AddressLine2
Output	City	Customer City	City
Output	Country	Customer Country	Country
Output	PostalCode	Customer Zip	PostalCode
Output	State	Customer State	state
Output	FormattedPhoneNumber	Customer Phone	phone
Output	FormattedFaxNumber	Fax	fax
Output	EmailAddress	Customer Email	email

Set Up the Accounts Auto-Fill Action

After you set up the Accounts Import integration, you must configure the Accounts Auto-Fill Action to execute this integration when it runs.

This setup involves:

- Enabling the auto-fill behavior
- Setting up the auto-fill action

Enable the Auto-Fill Behavior

To enable the auto-fill behavior:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. Click the name of a process.
3. Click the **Auto Fill Options** list and select **Accounts Information**.
4. Click **Save**.

Set Up the Auto-Fill Action

Here are the steps to set up the auto-fill action:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. In the Navigation list, ensure that **Documents** is selected, and click **List**.
3. In the Navigation list for the main document in the Document List page, select **Actions**, and click **List**.
4. Click the action name that has an auto-fill type. Typically, this is called **Refresh Account** or something similar.
5. Click the **Integration** tab.
6. Select **Accounts Integration** in the CRM Mappings list.
7. Click the **Mappings** tab.
8. Review the mappings between the Oracle CPQ Accounts attributes and the Transaction attributes. The auto-fill flow for Sales Account data is **Accounts Import Integration** > **CPQ Accounts** > **Transaction**. There are two sets of mappings: those contained in the XSL Result Parser above and then on the **Mappings** tab here.
9. Click **Update**.
10. Deploy the changes. See: *Deploy your changes*.

Configure the Open Transaction Action

Set Up the Open Transaction Action

The Open Transaction action runs every time a quote is opened. This action can run integrations that refresh the transaction with changes that have occurred in CX Sales since it was last viewed.

Here are the steps to set up the Open Transaction action:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. In the Navigation list, select **Process Actions**, and click **List**.
3. Click the **Open Transaction** link under the Action Name column.
4. Click the **Integration** tab.

5. Review the integrations and verify that the Apply Modify Functions integration is selected. This integration runs the modifications defined on the Modify tab, as well as the Advanced Modify functions for this action. This is a default action, and it can't be removed. It should be at the top of the sequence.
6. Click **Update**.
7. Deploy the changes. See: *Deploy your changes*.

Configure the Update Sales Action

Overview of the Update Sales Action

The Update Sales action is a commerce action used to synchronize the quote and quote lines with Oracle Sales.

This action runs a series of integrations that export the quote header and quote line details from the Oracle CPQ transaction to the quote (or sales order) in Sales.

This synchronization allows quote and quote line information to be available in Sales Workspace, reports, and search. It is also a prerequisite step for revenue reconciliation with opportunities.

Configuring this action is a multi-step involves these steps:

1. *Set Up the Upsert Quote Integration*
2. *Set Up the Export Lines Integration*
3. *Set Up the Line Sync Complete Integration*
4. *Set Up the Update Sales Action*

> **Note:** These steps assume that your Oracle CPQ site is provisioned with the Sales Reference Application or that you have used the provided migration package to import the artifacts referenced later in this chapter. If you are missing any of these predefined objects, contact Oracle Support for guidance.

Set Up the Upsert Quote Integration

The Upsert Quote integration calls the Oracle Sales REST Sales Orders service to send details from the Oracle CPQ transaction header to Sales.

Here's how you set up the Upsert Quote Integration:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. From the Navigation list for the Commerce Process, select **Integrations**, and click **List**.
3. If your Oracle CPQ site is provisioned with the Oracle Sales Reference Application, you may find a Quote Upsert integration already defined. Click the link for **OSC - Upsert Quote** or a similar link.
4. Review or update the fields in the Integration Information region:
    - **Name**: The name for the integration.
    - **Variable Name**: A unique identifier for the integration.

      > **CAUTION:** You can't change the Variable Name after you have created this integration.

    - **Description**: The description of this integration.

- **Timeout**: If you don't enter a value, the application defaults it to `5000` milliseconds.
- **ID Field** This is used to indicate the attribute that stores the integration object's ID on the Oracle CPQ transaction. However, in this REST integration, the Oracle Sales Quote ID is submitted as part of the request mapping. As a result, typically, this value will be: `transaction.none`.

5. Complete the fields in the End Points section:
   - **MetaData URL**: Enter the endpoint to retrieve the metadata about the Sales attributes available for mapping for this integration. For the standard quote upsert integration, the value is: `/crmRestApi/resources/11.13.18.05/salesOrders/describe`.
   - **Integration URL**: Enter the endpoint that gets the quote upsert request. For example: `/crmRestApi/resources/11.13.18.05/salesOrders`.
   - **Integration Request Headers**: Enter the headers to be passed in the request to the above integration endpoint. For the standard quote upsert integration, the value is: `Upsert-Mode:true`.
6. Review the Request Mapping for the REST integration by clicking the **Edit** button. These mappings show the quote attributes that will be pushed to Sales. In preconfigured sites, a set of standard fields are mapped; see *Upsert Quote Attribute Mappings*. To include custom fields, you must modify the attribute map accordingly. See *Edit Attribute Mappings*.

   > **Note:** When you save your edits, the Attribute Mapping page validates your mappings to assure compatible data types.

7. Click **Update**.
8. Deploy the changes. See: *Deploy your changes*.

Upsert Quote Attribute Mappings

This table describes standard attribute mappings for the Upsert Quote integration **Request**:

Sales Attribute Display Name	Sales Attribute Variable Name	CPQ Attribute Display Name	CPQ Attribute Variable Name (Type)
ID	OrderHeaderId	OSC Transaction ID	oRCL_OSC_TransactionID_t (text)
Reference Code	ExternalSystemReferenceCode	Transaction Source System	transactionSourceSystem_t (text)
External Host Name	ExternalHostName	Supplier's Company Name	_system_supplier_company_name (text)
CPQ Process Name	ExternalProcessName	Current Process Name	_system_process_name (text)
Reference Number	ExternalReferenceNumber	Current Unique Buy-Side ID	_system_buyside_id (text)
Quote ID	ExternalQuoteNumber	Transaction Number	transactionID_t (text)
Version	VersionNumber	Version Number	version_number_ versionTransaction_t (text)
Name	Name	Transaction Name	transactionName_t (text)
Owner	Owner	Owner	owner_t (text)
Total Nonrecurring Revenue	TotalNonRecurringRevenue	Total NRR (Net)	totalOneTimeNetAmount_t (currency)
Contract Start Date	ContractStartDate	Contract Start Date	contractStartDate_t (date)
Contract End Date	ContractEndDate	Contract End Date	contractEndDate_t (date)

Sales Attribute Display Name	Sales Attribute Variable Name	CPQ Attribute Display Name	CPQ Attribute Variable Name (Type)
Total Recurring Revenue	TotalRecurringRevenue	Total Recurring Revenue (Net)	totalRecurRevenue_t (currency)
Total Usage Revenue	TotalUsageRevenue	Total Usage Revenue (Net)	totalUsageRevenue_t (currency)
Total Contract Value	OrderTotal	Total Contract Value (Net)	totalContractValue_t (currency)
Total Monthly Recurring Revenue	TotalMonthlyRecurringRevenue	Total MRR (Net)	totalMonthlyNetAmount_t (currency)
Total Monthly Usage Revenue	TotalMonthlyUsageRevenue	Total MUR (Net)	totalMonthlyUsageRev_t (currency)
Proposal	ProposalExistFlag	Proposal Exists	proposalExists_t (boolean)
Win Status	WinStatusCode	OSC Status	oRCL_OSC_Status_t (text)
Currency	CurrencyCode	Currency	_system_current_document_currency_pref (text)
Status	Status	Status	status_t (text)
Valid To Date	ExpirationDate	Price Expiration Date	priceExpirationDate_t (date)
Opportunity ID	OptyId	Opportunity ID	opportunityID_t (text)
Customer ID	SoldCustomerPartyId	Customer ID	_customer_id (this is displayed as *_transaction*_customer_id in mapping UI) (text)

This table describes standard attribute mappings for the Upsert Quote integration **Response**:

Sales Attribute Display Name	Sales Attribute Display Name	CPQ Attribute Name	CPQ Variable Name (Type)
ID	OrderHeaderId	OSC Transaction ID	oRCL_OSC_TransactionID_t (text)

Set Up the Export Lines Integration

The Export Lines Commerce integration helps replicate and synchronize all quote lines, part lines, and root lines on an associated Commerce action in the Oracle CPQ to Oracle Sales integration.

> **Note:** Root lines are models or parts without parent items. They're used to forecast revenue at a model level instead of a part level. Root line integration is useful for customers with large quotes. It prevents performance issues when synchronizing many quote lines. See *Plan Your Integration*.

Sales users can search across multiple quotes to quickly retrieve quote line data. Quote line integration enables extensive search and reporting capabilities in Sales. The searches provide data-driven information to support multiple company roles.

- Salespeople can use this information to identify sales opportunities, direct a sales approach, and aid in discount decisions. They can also use this information to prompt customer follow-ups for status, product issues, availability issues, and renewals.

- Managers can evaluate appropriate discounts, measure product promotion marketing campaign results, focus sales team efforts, understand pricing sensitivity, and prepare sales reports.
- Customer service representatives can view order summaries and status when responding to customer inquiries.
- Site administrators can verify that integrations are working correctly.
- Integration administrators can use the attribute mapping UI to drag and drop attributes to define integration mappings.

Here's how you set up the Export Lines integration:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. In the Navigation list for the applicable process, select **Integrations**, and click **List**.
3. If your Oracle CPQ site is provisioned with the Oracle Sales Reference Application, you should find an Export Lines integration already defined. Click the link for **OSC - REST Export Lines** or a similar link.
4. Review or update the fields in the Integration Information region:
    - **Name**: Enter a name for the integration.
    - **Variable Name**: Enter a unique identifier.

      > **CAUTION:** You can't change the Variable Name after you have created this integration.

    - **Description**: Relevant details related about this integration.
    - **Timeout**: If you don't enter a value, the application defaults it to `5000` milliseconds.
    - **ID Field**: Enter the documentVarName.attributeVarName that stores the ID field for the corresponding Sales `salesOrderHeaders` object. For standard quote line integration with Sales, the value is: `transaction.oRCL_OSC_TransactionID_t`.
    - **Line Type Filter**: Select an option from these, based on your requirements:
        - **Part Lines**: Include only part items.
        - **Root Line**: Include only root model lines and standalone part lines.
        - **All Lines**: Include all root models, child models, and parts.
5. Complete the fields in the End Points section:
    - **MetaData URL**: Enter the endpoint to retrieve the metadata about the Sales attributes available for mapping in this integration. For the standard quote line integration with Sales, the value is: `/crmRestApi/resources/11.13.18.05/salesOrderLines/describe`.
    - **Integration URL**: Enter the endpoint that gets the upsert quote lines operation. For example: `/crmRestApi/resources/11.13.18.05/salesOrders`.
    - **Integration Request Headers**: Enter the headers to be passed in the request to the above integration endpoint. For the standard quote lines integration with Sales, the value is: `Upsert-Mode:true`.
    - **Batch Size**: Batch Size is set by default to a maximum of `500` quote lines that can be integrated in a single invocation of the API endpoint. Oracle CPQ automatically handles the multiple invocations needed for larger quotes.
6. Review the Request Mapping for the REST integration by clicking the **Edit** button. These mappings show the Quote Line attributes to be pushed to Sales. In preconfigured sites, a set of standard fields are mapped. See *Export Lines Attribute Mappings*. If you want to include custom fields, you must modify the attribute map accordingly. See *Edit Attribute Mappings*.

   > **Note:** When you save your edits, the Attribute Mapping page validates your mappings to ensure that there are compatible data types.

7. Click **Update**.
8. Deploy the changes. See: *Deploy your changes*.

Sales Quote Line Integration Attributes Mapping

The Attribute Mapping page has predefined attribute mappings for new customers and lets Sales customers modify their integration without the use of XSL. This page supports text-based searches to find attributes and then drag and drop them.

The Attribute Mapping page displays the Oracle CPQ attributes on one side of the page and the Sales attributes on the other side. Mapped attributes are displayed in the middle. Icons identify the attribute types. The attribute variable name is displayed when hovering over an attribute name. You can add new attribute mappings and edit or delete existing attribute mappings.

Here are the steps to add new attribute mappings or edit the existing attribute mappings:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. In the Navigation list for the applicable process, select **Integrations**, and click **List**.
3. Click the **REST-Export Lines** integration name.
4. Click **Edit**, next to **Request Mapping**.
5. Click the **Add Row** icon or drag and drop an attribute to create a new attribute mapping row.
    a. Select the appropriate Oracle CPQ attribute.
    b. Select the appropriate Sales attribute.
    c. Click the **Apply** icon or click outside the row to register the mapping.

    > **Note:** You can edit an existing attribute mapping using the edit icon. Similarly, if you want to delete an attribute mapping, use the delete icon.

6. Click **Save** to save changes, or **Finish** to save changes and exit the page.

Export Lines Attribute Request Mapping

This table shows the standard mapping as part of the Oracle CPQ and Sales integration for the export lines integration flow. Sales attributes are the target attributes, and Oracle CPQ attributes are the source attributes when the Export Lines integration runs.

Sales Attribute Display Name	Sales Attribute Variable Name	Oracle CPQ Attribute Name	Oracle CPQ Attribute Variable Name (Type)
Order Header ID	OrderHeaderId	OSC Transaction ID	oRCL_OSC_TransactionID_t (text)
External Line Number	ExternalOrderLineNumber	Document Number	_document_number (text)
Inventory Organization ID	InventoryOrgId	OSC Inventory Org ID	oRCL_OSC_InventoryOrgID_I (text)
Inventory Item ID	InventoryItemId	OSC Inventory Item ID	oRCL_OSC_InventoryItemID_I (text)
Revenue ID	RevnId	Opportunity Revenue Line ID	oRCL_OSC_RevnId_I (text)
Line Status	LineStatusCode	Status	status_I (menu)
Item Type	ItemTypeCode	Line Type	lineType_I (menu)
Quantity	Quantity	Quantity	requestedQuantity_I (integer)
UOM	UOMCode	Unit of Measure	requestedUnitOfMeasure_I (menu)
Line Price Period	PricePeriodCode	Price Recurrence Frequency	priceRecurFrequency_I (menu)
Line Currency	CurrencyCode	Currency	currency_t (menu)

Sales Attribute Display Name	Sales Attribute Variable Name	Oracle CPQ Attribute Name	Oracle CPQ Attribute Variable Name (Type)
Net Price	Price	Price (Net)	netPrice_I (currency)
Net Amount	Amount	Amount (Net)	netAmount_I (currency)
Line Discount	DiscountPercentage	Discount %	discountPercent_I (float)
Line Contract Periods	ContractPeriods	Contracted Periods	contractedPeriods_I (integer)
Line Contract Start Date	ContractStartDate	Contract Start Date	contractStartDate_I (date)
Line Contract End Date	ContractEndDate	Contract End Date	contractEndDate_I (date)
Line Request Date	RequestDate	Request Date	requestDate_I (date)
Line Win Loss Status	WinLossStatusCode	OSC Status	oRCL_OSC_Status_I (text)
Line Order Date	OrderDate	Order Date	orderDate_t (date)
Order Number	OrderNumber	Order Number	oRCL_ERP_OrderNumber_I (text)
Root Line	RootLine	Root Line	rootLine_I (menu)
Line Price Type	PriceTypeCode	Price Type (Rollup)	priceTypeRollup_I (menu)
Line Price Period	PricePeriodCode	Price Recurrence Frequency (Rollup)	priceRecurFrequencyRollup_I (menu)
Line Contract Periods	ContractPeriods	Contracted Periods (Rollup)	contractedPeriodsRollup_I (integer)
Line Discount	DiscountPercentage	Discount Percent (Rollup)	discountPercentRollup_I (float)
Net Price	Price	Net Price (Rollup)	netPriceRollup_I (currency)
Net Amount	Amount	Net Amount (Rollup)	netAmountRollup_I (currency)
Unit List Price	UnitListPrice	List Price (Rollup)	listPriceRollup_I (currency)
Nonrecurring Revenue Detail	SummableNonRecurringRevenue	Non-Recurring Revenue (Summable)	nonRecurRevSummable_I (currency)
Recurring Revenue Detail	SummableRecurringRevenue	Recurring Revenue (Summable)	recurringRevSummable_I (currency)
Usage Revenue Detail	SummableUsageRevenue	Usage Revenue (Summable)	usageRevSummable_I (currency)
Contract Value Detail	SummableContractAmount	Contract Value (Net Summable)	contractValue_I (currency)
Nonrecurring Revenue	NonRecurringRevenue	Non-Recurring Revenue (Rollup)	nonRecurRevRollup_I (currency)
Recurring Revenue	RecurringRevenue	Recurring Revenue (Rollup)	recurRevRollup_I (currency)
Usage Revenue	UsageRevenue	Usage Revenue (Rollup)	usageRevRollup_I (currency)
Line Contract Value	ContractValue	Contract Value (Rollup)	contractValueRollup_I (currency)
Monthly Recurring Revenue	MonthlyRecurringRevenue	MRR (Rollup)	monthlyRecurRevRollup_I (currency)
Monthly Usage Revenue	MonthlyUsageRevenue	MUR (Rollup)	monthlyUsageRevRollup_I (currency)

Predefined Sales Quote Line Integration Items

You can import a migration package to implement the predefined integration content.

The table here shows the predefined Sales attribute mappings. An asterisk (*) precedes Sales Reference Application attributes.

See the *Oracle CPQ Administration Online Help* for more information on attributes. With limited implementation setup, you can create quotes, and the two sites can exchange information about quote lines created or updated in Oracle CPQ.

Sales Attribute Name	Sales Variable Name	CPQ Attribute Name	CPQ Variable Name (Type)	Description
Order Header ID	Order Header ID	OSC Transaction ID	oRCL_OSC_TransactionID_t (text)	The ID generated by Sales to identify this transaction.
External Line Number	ExternalOrderLineNumber	Document Number	_document_number (text)	Unique subdocument number to be used as an identifier in a Commerce Process.
Inventory Organization ID	InventoryOrgId	OSC Inventory Org ID	oRCL_OSC_InventoryOrgID_l (text)	The inventory organization in Sales used for sales products.
Revenue ID	RevnId	*Opportunity Line ID	oRCL_OSC_RevnId_l (text)	The ID generated by Sales to identify the revenue line.
Line Status	LineStatusCode	Status	status_l (menu)	The status of this line.
Item Type	ItemTypeCode	*Line Type	lineType_l (menu)	The type of a transaction line, whether it represents a model or a part.
Quantity	Quantity	Quantity	requestedQuantity_l (integer)	Quantity of associated line being requested; can be user-entered or set logically.
UOM	UOMCode	Unit of Measure	requestedUnitofMeasure_l (menu)	The unit of measure of the item requested by the customer (for example, "case").
Line Price Type	PriceTypeCode	Price Type	priceTypeRollup_l (menu)	Indicates whether the amount on this line is charged once or periodically.
Line Price Period	PricePeriodCode	Period	pricePeriod_l (menu)	The period of service purchased at this price.
Line Currency	CurrencyCode	Currency	Currency_t (menu)	The Currency used to price and invoice this transaction.
Price	Price	Price (Net)	netPrice_l (currency)	The price paid by the customer for the item.
Line Amount	Amount	Amount (Net)	netAmount_l (currency)	The extended list amount minus any discounts for this line.

Sales Attribute Name	Sales Variable Name	CPQ Attribute Name	CPQ Variable Name (Type)	Description
Line Contract Value	ContractValue	Contract Value (Net)	ContractValue_I (currency)	The total contract value of this line, including all one time and recurring charges.
Line Discount	DiscountPercentage	*Discount %	discountPercent_I (float)	The percentage of the Contract Value (List) that is discounted off of the transaction line.
Line Contract Periods	ContractPeriods	Contracted Periods	contractedPeriods_I (integer)	Number of periods the customer has contracted to receive the item.
Line Contract Start Date	ContractStartDate	Contract Start Date	contractStartDate_I (date)	Date that the customer starts to receive the service.
Line Contract End Date	ContractEndDate	Contract End Date	contractEndDate_I (date)	Date that the customer stops receiving the service.
Line Request Date	RequestDate	Request Date	requestDate_I (date)	The date on which the user requests that fulfillment occur for this transaction line.
Line Win Loss Status	WinLossStatusCode	OSC Status	oRCL_OSC_Status_I (text)	The determining status of whether the line represents a won or a lost sale. This can be used in Deal Management analysis.
Line Order Date	OrderDate	Order Date	orderDate_I (date)	The date and time the order was placed for fulfillment.
Order Number	OrderNumber	*Order Number	oRCL_OSC_OrderNumber_I (text)	The order number assigned by the external order management and ERP application.

Set Up the Line Sync Complete Integration

The Line Sync Complete Integration updates the Sales Quote object to indicate that the synchronization of lines is complete.

Quotes with more than 500 lines will require several executions of line synchronization. While the Oracle CPQ Export Lines Integration handles these automatically, the Line Sync Complete Integration is required to complete the process and to trigger the revenue reconciliation process in which Sales updates the opportunity revenue lines for an active quote.

Here's how you set up the Lines Sync Complete integration:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. In the Navigation list for the applicable process, select **Integrations**, and click **List**.
3. If your Oracle CPQ site is provisioned with the Oracle Sales Reference Application, you should find a Lines Sync Complete integration already defined. Click the link for **REST – Line Sync Complete** or a similar link.

4. Review or update the fields in the Integration Information region:
    - **Name**: The name for the integration.
    - **Variable Name**: Enter a unique identifier.

      > **CAUTION:** You can't change the Variable Name after you have created this integration.

    - **Description**: Relevant details related about this integration.
    - **Timeout**: If you don't enter a value, the application defaults it to `5000` milliseconds.
    - **ID field**: This is used to indicate the attribute that stores the integration object's ID on the Oracle CPQ transaction. However, in this REST integration, the Sales Quote ID is submitted as part of the request mapping. As a result, typically, this value will be: `transaction.none`.
5. Complete the fields in the End Points section:
    - **MetaData URL**: Enter the endpoint to retrieve the metadata about the Sales attributes available for mapping in this integration. For the standard quote upsert integration, the value is: `crmRestApi/resources/11.13.18.05/salesOrders/describe`.
    - **Integration URL**: Enter the endpoint that gets the quote upsert request. For example: `/crmRestApi/resources/11.13.18.05/salesOrders`.
    - **Integration Request Headers** Enter the headers to be passed in the request to the above integration endpoint. For the standard quote upsert integration, the value is `Upsert-Mode:true`.
6. Review the Request Mapping for the REST integration by clicking the **Edit** button. These mappings show the Quote attributes to be pushed to Sales. In preconfigured sites, a set of standard fields are mapped; see *Upsert Quote Attribute Mappings*. If you want to include custom fields, you must modify the attribute map accordingly. See *Edit Attribute Mappings*.

   > **Note:** The Attribute Mapping page validates your mappings as you edit to assure compatible data types.

7. Click **Update**.
8. Deploy the changes. See: *Deploy your changes*.

Lines Sync Complete Attribute Mappings

The standard attribute mappings for the Line Sync Complete integration are:

Sales Attribute Display Name	Sales Attribute Variable Name	CPQ Attribute Name	CPQ Attribute Variable Name (Type)
ID	OrderHeaderId	OSC Transaction ID	oRCL_OSC_TransactionID_t (text)
Last Synchronized	LastOptySyncDate	Current Date	_system_date (date)

Set Up the Update Sales Action

When a salesperson clicks the Update Sales action on a Quote, it does several things: it triggers an update to the Sales copy of the Quote and Quote Lines, and it synchronizes the Quote Line items.

Here's how to set up the Update Sales action:

1. Go to **Administration Platform** > **Commerce and Documents Process Definition**.
2. In the Navigation list for the applicable process, select **Integrations**, and click **List**.

3. If your Oracle CPQ site is provisioned with the Oracle Sales Reference Application, you may find an Update Sales action already defined. Click the link for **Update Opportunity** action or a similar link. If your site doesn't have an action predefined, you must create one manually.
4. Click the **Integration** tab.
5. Review the integrations and verify that they're selected and sequenced in this order:

Integration	Description
Apply Modify Functions	Runs the modifications defined on the Modify tab and the Advanced Modify functions for this action. This is a default action that cannot be removed, but it should be at the top of the sequence.
Upsert Quote	Creates or updates the Sales Quote or Sales Order for the latest values present on the Oracle CPQ transaction.
Export Lines	Creates or updates the Sales Quote Line items with the products and prices of the transaction lines present on the Oracle CPQ transaction.
Line Sync Complete	Indicates to Sales that the synchronization of all lines for the quote has completed and triggers revenue reconciliation.

6. Click **Update**.
7. Deploy the changes. See: *Deploy your changes*.

Edit Attribute Mappings

The Oracle CPQ REST Integration Type includes an Attribute Mapping UI for administrators to map Oracle Sales attributes to Oracle CPQ attributes. Depending on the integration type, mapped fields are either imported from a Sales object to an Oracle CPQ object, or exported from an Oracle CPQ object to a Sales object.

You can use this feature with these integrations:

- Import Opportunity
- Upsert Quote
- Export Lines
- Line Sync Complete

The Attribute Mapping page has predefined standard attribute mappings for new customers and allows sales administrators to modify and extend the integrations without the use of XSL templates. This page supports text-based searches to find available attributes and drag and drop them.

The Attribute Mapping page always displays the available Oracle CPQ attributes on one side of the page and the available Sales attributes on the other side. The mapped attributes are displayed in the middle with an arrow indicating the direction of the data flow. Icons identify the attribute type, and the attribute variable name displays when you hover over an attribute name. You can add new attribute mappings and edit (with the edit icon) or delete (with the delete icon) existing attribute mappings.

Here are the steps to add new attribute mappings or edit the existing attribute mappings:

1. Go to **Administration Platform** > **Commerce and Documents Process Definition**.
2. In the Navigation list for the applicable process, select **Integrations**, and click **List**.
3. Click the integration name for the REST Integration that you want to edit.
4. Click **Edit**, next to Request Mapping or Response Mapping.
5. Click the **Add Row** icon or drag and drop an attribute to create a new attribute mapping row.
6. a. Select the appropriate Oracle CPQ attribute.
   b. Select the appropriate CX Sales attribute.
   c. Click the **Apply** icon or click outside the row to register the mapping.
7. Click **Save** to save changes or click **Finish** to save changes and exit the page.
8. Deploy the changes. See: *Deploy your changes*.

Configure Navigation

Hide the Navigation Links for CX Sales Users

By default, the Oracle CPQ navigation bar includes links to a number of features that take a user outside of the basic quoting flow. These features are useful for administrators, but can be confusing or disruptive for sales users. It may be beneficial to modify them.

Here are examples of links you may want to hide in the navigation bar:

- Home page
- Help
- Log out
- Transaction Manager
- Reporting Manager
- Administration

Here are the steps to hide the navigation links for Sales users:

1. Go to **Administration Platform** > **Styles and Templates** > **Header & Footer** > **Navigation Menus**.
2. Click **List Links** next to the Commerce Navigation Menu.
3. Click **Customize Menus**.
4. Company Type has a default value of `FullAccessWithESales`. This value is applicable for Sales users.
5. Select the **SalesAgent** for User Type and click **Go**.
6. Multi-select the Transaction Manager and the Transaction Reporting Manager entries in the Navigation list.
7. Click **Hide**. The links appear in the Hidden Links list.

> **Note:** Make sure these links are listed in the upper Hidden Links list. Some of these links may not display on the page, depending on the features set up for the Oracle CPQ site: Transaction Manager, Reporting Manager, Home Page (internal), Favorites (internal), and View Shopping Cart.

8. Click **Update**.
9. Click **Back** to go to the Navigation Items List - Commerce page.

10. From there, click **Back** to go to the Navigation Menus page.
11. Click **Deploy**.
12. Sign in proxy as a Sales user and verify that the links you have hidden don't appear. Here are the steps:
    a. Go to **Administration Platform** > **Users** > **Internal Users**.
    b. Click the **Proxy Login** icon for a Sales user. The home page for that user appears. Note that this home page appears to the user when he signs in directly to Oracle CPQ, rather than through single sign-on from Sales.
    c. Verify that the elements are hidden correctly.
    d. Exit the page using the **Proxy Logout** icon. You're returned to the User Administration List page.
13. Deploy the changes. See: *Deploy your changes*.

Set Up the Close Action

You've configured various actions in Oracle Sales to create and open quotes in Oracle CPQ. Now let's configure the actions in Oracle CPQ that return the users back to Sales. Additionally, you may want to hide links to certain pages.

The Close action is a commerce action that users use to close the Oracle CPQ window and return to Oracle Sales. This action has a destination setting that triggers a navigation event in the browser. This action also triggers the integrations that update the Sales quote and quote lines as the user completes their quoting session.

Here are the steps to set up the Close action's destination:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. In the Navigation list, ensure that **Documents** is selected, and click **List**.
3. If your Oracle CPQ site is provisioned with the Oracle Sales Reference Application, you may find a Return to CX Sales action already defined.
4. Select the **Destination** tab.
5. Select the **Close Parent** window option.
6. Click **Update**.

Note: Oracle recommends launching the Oracle CPQ page in an iFrame.

Here are the steps to set the Oracle CPQ General Site Option to launch the Oracle CPQ page in an iFrame:

1. Go to **Administration Platform** > **General** > **General Site Options**.
2. In the **Options-General** section, set **Occupy entire window when the site is inside a frame** to No.

   If you want to open Oracle CPQ in a full window (by setting this value to Yes), you must modify the commerce library function **OSC Return to Sales Cloud** with the correct Sales host URLs integrating the Oracle CPQ site, and then associate that function to the Close action. This function is provided in the Oracle Sales Reference Application.
3. Click **Update**.

Here are the steps to set up the Close action's integrations:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. In the Navigation list, ensure that **Documents** is selected, and click **List**.
3. If your Oracle CPQ site is provisioned with the Oracle Sales Reference Application, you may find a Return to CX Sales action already defined.
4. Select the **Integration** tab.

5. Review the integrations and verify that these integrations are selected and sequenced in this order:

Integration	Description
Apply Modify Functions	Runs the modifications defined on the Modify tab and the Advanced Modify functions for this action. This is a default action that cannot be removed, but it should be at the top of the sequence.
Upsert Quote	Creates or updates the Sales quote or sales order for the latest values present on the Oracle CPQ transaction.
Export Lines	Creates or updates the Sales quote line items with the products and prices of the transaction lines present on the Oracle CPQ transaction.
Line Sync Complete	Indicates to Sales that the synchronization of all lines for the quote has completed and triggers revenue reconciliation.

6. Click **Update**.
7. Deploy the changes: *Deploy your changes*.

Deploy Your Changes

Deploy the Changes

Most administrative changes are not immediately reflected in Oracle CPQ. After they're first saved, they're held in a pending status until those changes are deployed. After the changes are deployed, they become active in the runtime interface.

After you have completed all the configurations mentioned in the previous sections, you must deploy those changes. You can deploy the changes as you go, or you can make all the changes and deploy them together at the end. Here are the steps to deploy Commerce changes to Oracle CPQ:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. Select **Deployment Center** from the **Navigation** drop-down list for the commerce process.
3. Click **List**.
4. In the Deployment Center page, click **Add Event**. A deployment page appears showing a pending status.
5. Click **Refresh** and the deployment status is updated.

   When the deployment ends, the status section shows a message indicating that no events are scheduled to run. The last deployed date and time show the time details of the most recent deployment.

6 Products Integration

Set Up and Run the Parts Integration

You must set up and run the integration between Sales and Oracle CPQ at least once before the Create Revenue Items and Delete Revenue Items integrations start functioning between the quotes and opportunities.

Establish Oracle PIM as the Parts Source

The Import Parts integration synchronizes any changes made to items in the Product Information Management (PIM) item master into Oracle CPQ.

Here are steps to see the current parts source in Oracle CPQ:

1. Sign into Oracle CPQ as a parts administrator or as a Full Access user.
2. Go to the Admin Home page.
3. Click **Parts** in Products the products area. The Parts Search for Admin page appears.

   The Item Master field shows the current parts source. If you see 'Partner' as the item master (source), it's referring to PIM.

> **Note:** If you don't find the Item Master section on the Parts Search for Admin page, contact Oracle Support to enable the parts integration. Similarly, contact Oracle Support to change the Parts Master (source).

Here are the steps to set up the integration:

1. Sign into Oracle CPQ as a Full Access user.
2. Go to the Admin Home page.
3. Click **Parts** in the Products region. The Parts Search for Admin page appears.
4. Click **Integration**.
5. In the List Integration region, select the **Import Parts** check box.
6. Upload the Integration XSL files for both SOAP Generation and Result Parser XSL files that have the field mappings for the integration. The integration uses the "findItem" SOAP web service of PIM. The fetch criteria can be set up as needed, according to your business needs.

   Both standard and part custom fields can be mapped in the Result Parser XSL file. The field `_partner_part_id` is the primary field for mapping and is used as the cross-reference ID for the integration.

   The `_partner_part_id` and `partner_organization_id` are important fields in the integration. These correspond to `inventory_item_id` and `inventory_organization_id` in PIM.

   > **Note:** Contact Oracle Support for the reference XSL files.

7. Click **Import** to perform a one-time integration, or click **Schedule** to schedule a one-time integration or recurring integrations. If you schedule one or more integrations, the new schedule details for job import dialog box appears.
8. Select a **Schedule Type** and the corresponding **frequency**:
   - **Monthly**: Select the day of the month and the time of the integration.

- **Weekly**: Select the day of the week and the time of the integration.
- **Daily**: Select the time of the integration.
- **Hourly**: Select an interval of 1-23 hours.
- **On Demand**: Select the date and time of a one-time integration.

9. Optionally, add start and end dates for a recurring integration.
10. Select either **All Parts** or **Delta**, depending on whether all parts always need to be integrated or only parts that are modified since the last integration.
11. When you're done with the scheduling details, click **Add Schedule**.
12. See the integration logs available in the Parts Integration and the error logs for any troubleshooting or diagnosis.

Establish Oracle CPQ as the Parts Source

The Export Parts integration synchronizes any changes made to parts in Oracle CPQ into the PIM item master.

Here are the steps to see the current the Parts source in Oracle CPQ:

1. Sign into Oracle CPQ as a parts administrator or as a Full Access user.
2. Go to the Admin Home page.
3. Click **Parts** in the Products region. The Parts Search for Admin page appears. The application listed under Item Master is currently the Parts Master ("BigMachines" means that Oracle CPQ is the Parts source).

Here are the steps to set up the integration:

1. Sign into Oracle CPQ as a Full Access user.
2. Go to the Admin Home page.
3. Click **Parts** in the Products region. The Parts Search for Admin page appears.
4. Click **Integration**.
5. Select the check box for the **Export Parts** integration.
6. Upload the Integration XSL file for SOAP Generation. The integration uses the "process Item" SOAP web service of PIM. Both the standard and custom part fields can be mapped in the SOAP Generation XSL file, according to your business needs.

   The field `_partner_part_id` is the primary field for mapping and is used as the cross-reference for the integration.

   > **Note:** Contact Oracle Support for the reference XSL files.

7. Click **Export** to perform a one-time integration, or click the **Schedule** button to schedule a one-time integration or recurring integrations.

   If you schedule one or more integrations, the new schedule details for job import dialog box appears.
8. Select a **Schedule Type** and the corresponding **frequency**.
   - **Monthly**: Select the day of the month and the time of the integration.
   - **Weekly**: Select the day of the week and the time of the integration.
   - **Daily**: Select the time of the integration.
   - **Hourly**: Select an interval of 1-23 hours.
   - **On Demand**: Select the date and time of a one-time integration.
9. Optionally, add start and end dates for a recurring integration.

10. Select either **All Parts** or **Delta**, depending on whether all parts always need to be integrated or only parts that have been changed since the last integration.
11. When you're done with the scheduling details, click **Add Schedule**.
12. See the integration logs available in the Parts Integration and the error logs for any troubleshooting or diagnosis.

Specify Units of Measure

When you sync parts using the Product Hub web service integration, the supplied integration uses the primary Unit of Measure (UOM) defined for sales products in Sales. You need to add this value to the list of valid UOM values.

Sales products require that the Primary UOM be uniquely defined for each site as part of the standard setup within Product Information Management. Those configuring the site and implementing must know the code value used for this UOM.

> **Note:** Each part (item/product) can have a different Primary UOM defined in Sales. Therefore, you need to maintain all the different Primary UOM codes in Oracle CPQ in the UOM attribute on the Transaction Line.

To specify UOMs in Oracle CPQ:

1. Go to **Administration Platform** > **Commerce and Documents** > **Process Definition**.
2. Click **List**. The Document List page appears with attributes selected for the Navigation values for Transaction and Transaction Line.
3. Click **List** for the Transaction Line row.
4. Scroll to the **Unit of Measure** attribute name and click it.
5. Enter the text label to be displayed for this UOM in the **Displayed Text** text box.
6. Enter the exact code value used in Sales in the **Variable Name** text box (you might need to edit the default value that's displayed for this).
7. Click **Update** to save the added code value.
8. Deploy the changes.
9. Click **Add Entry**. The new code value appears in the list of values for the menu attribute.

> **Note:** If parts are manually created or sourced in Oracle CPQ, this code value must be used for all parts to be integrated.

Define Parts Prices in Oracle CPQ

The starting or base list prices for parts can be set up in Oracle CPQ. These base prices display in quotes after salespeople add the parts to quotes.

You can define the base prices for parts in multiple currencies, for example, in both the base currency of the site and in additional currencies. After you enable multiple currencies on the Oracle CPQ site, they're available in the Host Company page on the Administration page for further control of those currency codes that are actually required in the implementation.

When parts have base prices defined in multiple currencies, the appropriate base price of the part is applied based on the transactional currency on the quote and this transactional/quote currency is mapped to opportunity currency.

Note: Contact Oracle Support to enable multiple currencies in Oracle CPQ.

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