

# Oracle Configure, Price, Quote

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**Integrating Oracle Sales with Oracle  
CPQ**

24C



Oracle Configure, Price, Quote  
Integrating Oracle Sales with Oracle CPQ

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# Contents

<b>Get Help</b>	<b>i</b>
<hr/>	
<b>1 About This Guide</b>	<b>1</b>
Audience and Scope	1
Related Guides and Help	1
<b>2 Introduction</b>	<b>3</b>
Overview of the Oracle Sales and Oracle CPQ Integration	3
Supported Business Flows	3
How the Applications Synchronize Data	5
<b>3 Plan Your Implementation</b>	<b>7</b>
Overview of Planning Your Implementation	7
Choose a Product Source	7
Model Your Products and Prices	8
Options for Quote Line Type Sync	9
Quote Line Sync vs Revenue Reconciliation Sync	10
Determine User Authentication Solution	10
Use Rollup Attributes	11
<b>4 Oracle Sales Configuration</b>	<b>13</b>
Oracle Sales Configuration Steps	13
Initial Sales Configuration	13
Get Parameter Values	15
Configure the Integration URLs	16
Additional Configurations	21
<b>5 Oracle CPQ Configuration</b>	<b>25</b>
Oracle CPQ Configuration Steps	25
Configure the Integration User	25


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Configure the New Transaction Action	26
Configure the Open Transaction Action	30
Configure the Update Sales Action	31
Configure Navigation	41
Deploy Your Changes	43
<b>6 Products Integration</b>	<b>45</b>
Set Up and Run the Parts Integration	45
Specify Units of Measure	47
Define Parts Prices in Oracle CPQ	47
<b>7 Additional Classic Sales Setup Tasks</b>	<b>49</b>
Enable the Quotes UI Elements	49
Configure the Actions Menu for Quotes	49
Set Up Reconciliation of Revenue Lines from Quote Lines	51
Sales and Oracle CPQ Attributes Mapping to Sync Revenue Lines from Quote Lines	53
Show Price Type on Opportunity Product (Revenue) Lines	54
Enable Revenue Attributes for Revenue Lines and Workspace Search	55
Add the Custom Currency Type Field to Quotes	56
Enable Salespeople to Create a Copy from an Opportunity Quote	57
Enable Creating a Quote Automatically from an Opportunity	57
Renewal Opportunities	58
Quote Security	60
<b>8 Using Quotes in Classic Sales</b>	<b>63</b>
Overview of Using Quotes	63
Get Started with Quotes and Orders	64
Create and Update a Quote for an Opportunity	64
Make a Copy from an Opportunity Quote	65
Create and Update a Quote for an Account	66
Make Quotes Active without Navigating to Oracle CPQ	66
Search Quotes and Quote Lines in Workspace	67
How is the number of open quotes on the Quotes and Orders summary calculated?	67
How do salespeople leave Oracle CPQ within Sales?	67
Does the status of a quote or sales order affect opportunity status?	68

# Get Help

There are a number of ways to learn more about your product and interact with Oracle and other users.

## Get Help in the Applications

Use help icons  to access help in the application. If you don't see any help icons on your page, click your user image or name in the global header and select Show Help Icons.

## Get Support

You can get support at [My Oracle Support](#). For accessible support, visit [Oracle Accessibility Learning and Support](#).

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## Join Our Community

Use [Cloud Customer Connect](#) to get information from industry experts at Oracle and in the partner community. You can join forums to connect with other customers, post questions, and watch events.

## Learn About Accessibility

For information about Oracle's commitment to accessibility, visit the [Oracle Accessibility Program](#). (if videos) Videos included in this guide are provided as a media alternative for text-based topics also available in this guide.

## Share Your Feedback

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You can email your feedback to [oracle\\_fusion\\_applications\\_help\\_ww\\_grp@oracle.com](mailto:oracle_fusion_applications_help_ww_grp@oracle.com).

Thanks for helping us improve our user assistance!



# 1 About This Guide

## Audience and Scope

Read this guide to understand how to implement and support the integration between Oracle classic 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 classic 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 classic Sales users:

- Create quotes in Oracle CPQ from classic 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 classic 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 classic 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 could 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 classic Sales and Oracle CPQ licensing agreements.

## Related Guides and Help

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

Guide or Help	Description
<a href="#">Oracle CPQ Online Help</a>	Provides an overview of the Oracle Configure, Price, and Quote (Oracle CPQ) capabilities, as well as implementation concepts and procedures for Oracle CPQ.
<a href="#">Oracle Sales Questions and Answers</a>	Contains FAQs and answers to customer questions about sales implementation and user tasks.

Guide or Help	Description
<i>How do I get started with the Revenue Transformation Solution?</i>	Describes how to get started with the Revenue Transformation Solution that combines Oracle Sales, Oracle Configure, Price, and Quote (Oracle CPQ), Oracle Sales Performance Management, and Oracle Subscription Management – plus a host of Oracle's other revenue operations applications – to establish and accurately manage sales targets, sell any combination of products and services on a subscription basis, and provide global visibility into sales performance and revenue reporting.
<i>Oracle Cloud Infrastructure Documentation</i>	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.
<i>Oracle Cloud: Administering Oracle Identity Cloud Service</i>	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.
<i>Oracle Architecture Center SSO Information</i>	Lists the high-level steps to set up Oracle Applications Cloud with single sign-on (SSO)
<i>Oracle Cloud: Using the Oracle CX Sales and B2B Service Adapter with Oracle Integration</i>	Describes how to configure and add the Oracle CX Sales and B2B Service Adapter to an integration in Oracle Integration
<i>Oracle Cloud: Using the Oracle CPQ Cloud Adapter with Oracle Integration</i>	Describes how to configure and add the Oracle CPQ Cloud Adapter to an integration in Oracle Integration



## 2 Introduction

### Overview of the Oracle Sales and Oracle CPQ Integration

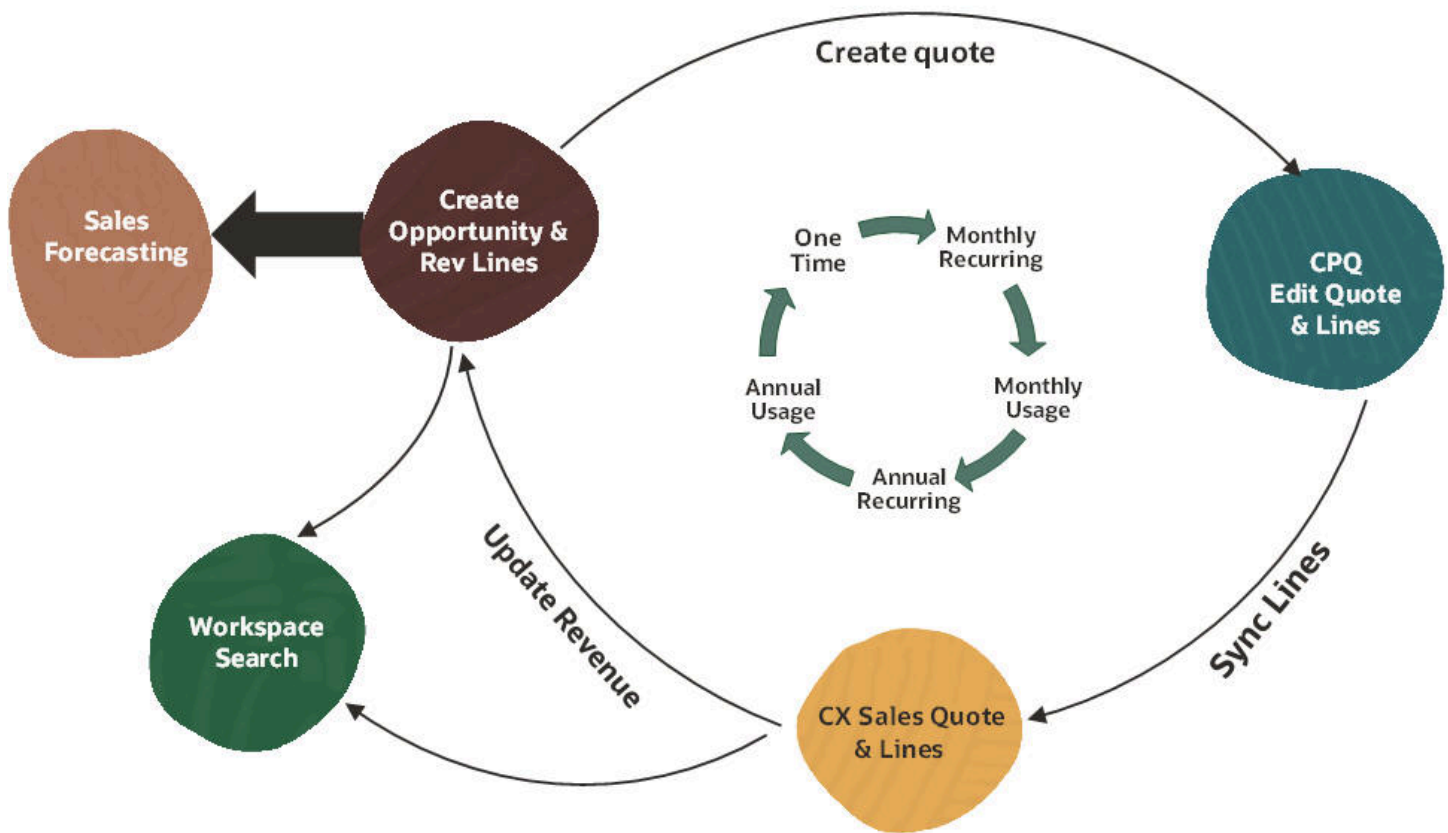
The integration between Oracle Sales and Oracle CPQ supports standard B2B selling processes, which feature highly configurable products, variable or dynamic pricing models, discount negotiations requiring executive approval, and large, branded sales documents.

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 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. For more information, see [Overview of Planning Your Implementation](#).

### Supported Business Flows

The following diagram summarizes the flow of information between Oracle 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 in classic Sales. 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 in classic Sales. 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 in classic Sales. 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 in classic Sales. 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 classic Sales accounts and opportunities.
- View summary information about a transaction in the Quotes and Orders tab in classic Sales accounts and opportunities.

- Sync quotes and quote lines from Oracle CPQ to classic Sales.
- View a list of currently active and historical quotes and quote lines in classic 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 Oracle CPQ in Oracle classic Sales, start with *Overview of Using Quotes* in this 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. *Overview of Configuring the Integration URLs*

Additional integrations include:

- *Use Multiple CPQ Processes with a Single Sales Instance*
- *Update Opportunity Status Based on Quote Status*

## 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 lines 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 of prices after the prices have been synchronized with the opportunity.

To show the price type on the revenue pages in opportunities:

1. Set the profile option, Enable the Display Price Type on Recurring Schedule Page.
2. Add the Price Type field to the Opportunity Revenue Line and Recurring Schedule pages.

## Enable the Display Price Type on Recurring Schedule Page 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, Display Price Type on Recurring Schedule page (ORA\_MOO\_REVN\_RECUR\_PRICETYPE). The default value at Site level is No.
3. Set the profile option value at Site level to Yes.
4. Save the changes.
5. Sign in again for the change to take effect.

## Add the Price Type Field to Opportunity Revenue Pages

1. Sign in as a setup user.
2. Navigate to **Configuration > Sandboxes**.
3. Enter a sandbox that has Application Composer enabled.
4. Navigate to **Configuration > Application Composer > Standard Objects > Opportunity > Pages > .**
5. In the Details Page Layouts region, duplicate that standard layout and save and edit the your copy.
6. In the Details Layout page, click the edit icon next to the Edit Revenue Table region.
7. In the Configure Detail Form section, move **Price Type** from Available Fields to Selected Fields.
8. Save and close the page layout.
9. Publish your sandbox according to your company's business practices.

## 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"
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
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: 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={version_id}%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:
  - o Offering: Sales (click the drop-down list next to Setup: and select **Sales**)
  - o Functional Area: Integrations
  - o 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.

- o **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

### Use Multiple CPQ Processes with a Single Sales Instance

You can use multiple Oracle CPQ processes to price and quote products -- while using a single Oracle Sales instance to create and add quotes to an opportunity.

Configuration, pricing, and quoting (CPQ) processes can differ based on opportunity attributes. For example, opportunities can vary by business unit, revenue amount, close date, or some custom attribute. The connection to a specific process is defined by the condition rules on opportunity attributes as part of the integration definition between Sales and Oracle CPQ.

You can set up rules based on opportunity attributes to control access to multiple CPQ processes. In addition, you can have intelligent validation of rules across multiple CPQ processes.

**Note:** The multiple process functionality is only for opportunity quotes. There's no support available for other objects.

## High-Level Steps to Set Up Multiple Processes Support

1. Define the Oracle CPQ processes by specifying the End Point URL, Process Name, and Document Name. Enter the Authorization details.
2. Set the multiple Oracle CPQ processes to be Active at the same time with a Priority value while mark one process to be the "Default".
3. Specify Condition Rules for each Oracle CPQ process.

**Note:** Rules can be written only on opportunity attributes that are queryable. In Application Composer, set the opportunity attributes to searchable if you want them to participate in Condition Rules.

4. Save your changes.

## Tips and Considerations

Keep these tips and considerations in mind:

- One Oracle CPQ process is always set as the default. If rules aren't set up or rules are set up incorrectly and the system can't resolve to a specific process, then it uses the process specified as the default for quoting.
- A priority mechanism is used if multiple Oracle CPQ process rules are in conflict. The lower numbered process is considered to be the higher priority.
- The system evaluates conditions for each Oracle CPQ process based on priority order, to compare against current opportunity for which the quote is being processed.

## 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 in to 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 in CRM, then create one by linking to the Fusion connector. **If one already exists, then skip to step 4.**

**Note:** To create a new CRM integration, see *Oracle Fusion CRM Integration*.

4. Enter the sign-in information and password for the Sales user you identified earlier 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. These details 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/{opptyNumber}` where `{opptyNumber}` 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)

Sales Attribute Display Name	Sales Attribute Variable Name	CPQ Attribute Name	CPQ Variable Name (Type)
Opportunity ID	Optyld	Opportunity ID	opportunityID_t (text)
Owner	OwnerResourcePartyId	OSC Owner Resource Party ID	oRCL_OSC_ OwnerResourcePartyID_t (text)
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-rel190-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 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 in 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 the 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 <i>_transaction_customer_id</i> in mapping UI) (text)

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

Sales Attribute Display Name	Sales Attribute Variable 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	RevId	Opportunity Revenue Line ID	oRCL_OSC_RevId_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_I (text)	The inventory organization in Sales used for sales products.
Revenue ID	RevnId	*Opportunity Line ID	oRCL_OSC_RevnId_I (text)	The ID generated by Sales to identify the revenue line.
Line Status	LineStatusCode	Status	status_I (menu)	The status of this line.
Item Type	ItemTypeCode	*Line Type	lineType_I (menu)	The type of a transaction line, whether it represents a model or a part.
Quantity	Quantity	Quantity	requestedQuantity_I (integer)	Quantity of associated line being requested; can be user-entered or set logically.
UOM	UOMCode	Unit of Measure	requestedUnitofMeasure_I (menu)	The unit of measure of the item requested by the customer (for example, "case").
Line Price Type	PriceTypeCode	Price Type	priceTypeRollup_I (menu)	Indicates whether the amount on this line is charged once or periodically.
Line Price Period	PricePeriodCode	Period	pricePeriod_I (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_I (currency)	The price paid by the customer for the item.
Line Amount	Amount	Amount (Net)	netAmount_I (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 Sales Users

By default, the Oracle CPQ navigation bar includes links to several that take Sales users outside of the basic quoting flow. These features are useful for administrators, but can be confusing or disruptive. You might want to change them.

Here are examples of links you might 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 **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 Hidden Links list. Some of these links might 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've 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 they sign 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 the Changes*.

## Set Up the Close Action

You've configured various actions in 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. And, you might want to hide links to certain pages.

### Set Up the Close Action High-Level Steps

Here are the high-level steps to set up the Close action:

1. *Set Up the Close Action Destination*
2. *Set Up the Close Action Destination Set Up the Close Action Destination*
3. *Launch the Oracle CPQ Page in an iFrame*
4. *Set Up the Close Action Integrations*

### Set Up the Close Action Destination

The Close action is a commerce action that salespeople use to close the Oracle CPQ window and return to 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 salespeople complete their quoting sessions.

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 might find a Return to CX Sales action already defined.
4. Select the **Destination** tab.
5. Select the **Close Parent** window option.
6. Click **Update**.

### Launch the Oracle CPQ Page in an iFrame

**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 Oracle CPQ to open in a full window (by setting this value to Yes), you must change the commerce library function `osc Return to Sales cloud` with the correct Sales host URLs integrating the Oracle CPQ site.



Then, you must associate that function with the Close action. This function is provided in the Oracle Sales Reference Application.

3. Click **Update**.

## Set Up the Close Action Integrations

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 might 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 the order shown in this table:

Integration	Description
Apply Modify Functions	Runs the modifications defined on the Modify tab, as well as the Advanced Modify functions for this action. This is a default action that can't 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 from the Oracle CPQ transaction.
Export Lines	Creates or updates the Sales quote line items with the products and prices of the transaction lines from the Oracle CPQ transaction.
Line Sync Complete	Indicates to Sales that the synchronization of all lines for the quote has completed; triggers revenue reconciliation.

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

## Deploy Your Changes

### Deploy the Changes

After you've completed 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.

**Note:** Most administrative changes don't appear immediately 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 UI.

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.

# 7 Additional Classic Sales Setup Tasks

## Enable the Quotes UI Elements

Use the Structure page to enable the UI elements of the quotes integration.

The classic Sales UI elements include:

- The Quotes and Orders icon on the springboard
- The Quotes and Orders link in the Navigator
- The Quotes and Orders landing page

Salespeople click **Quotes and Orders** in the Navigator or springboard to launch the Quotes and Orders landing page. The quotes landing page shows a salesperson's list of relevant quotes, based on the default search. Salespeople can search for quotes from the quotes landing page or from the global search.

To enable the Quotes and Orders UI elements:

1. Sign in as the sales administrator or as a setup user.
2. Activate a sandbox.
3. Navigate to **Configuration > Structure**.
4. In the Navigation Configuration page, select **Quotes and Orders** in the Sales section.
5. In the Edit Page Entry: Quotes and Orders page, select **Yes** for the Show on Navigator and Show on Springboard options.
6. Click **Save and Close**.
7. Publish the sandbox according to your company's business practices.

## Enable Quotes by User Role

You can enable access to quotes by user role. Enable the Quotes and Orders icon for each user role using the Structure page. See the related topics for more information.

### *Related Topics*

- [Overview of Configuring Home Page and Navigation](#)
- [Configure the Navigator and Page Entries on the Home Page for Navigation](#)
- [Edit and Reorder Groups and Page Entries for Navigation](#)
- [Examples of EL Expressions](#)

## Configure the Actions Menu for Quotes

Configure the Quotes action menus, such as disabling actions or removing actions altogether. The action menus show up in quote lines in the Edit Opportunity and Edit Account Quotes and Orders subtabs.

You can use either lookup types or Groovy scripting to make the changes.

You must configure the Oracle Configure, Price, and Quote (Oracle CPQ) Action Menu Control lookup to control the display of options in the Actions menu. Set the value to Yes for these codes and enable the lookup type codes.

Lookup Type	Meaning	Description
ORA_ZCA_CPQ_ACTION	CPQ Action Menu Control	Consists of codes that you select to control the display of CPQ options in the Actions menu.
<b>Lookup Codes</b>		
ORA_ZCA_CPQ_ACTION_EDIT	Edit command in the CPQ action menu	This lookup option maps to the Edit command in the CPQ Actions menu.
ORA_ZCA_CPQ_ACTION_DUPLICATE	Duplicate command in the CPQ action menu	This lookup option maps to the Duplicate command in the CPQ Actions menu.
ORA_ZCA_CPQ_ACTION_NEW_VERSION	Create Version command in the CPQ action menu	This lookup option maps to the Create Version command in the CPQ Actions menu.

Here's how to control the display of Oracle CPQ options in the Actions menu.

1. Navigate to the Manage Standard Lookups task in Setup and Maintenance.
2. Search for the **CPQ Action Menu Control** in the Meaning lookup type.
3. Set the order of the values to the order in which you want them to appear in the Actions menu.
4. Select the **Enabled** check box.

## Use a Groovy Script

You can also use the `cpqActionMenuPreRender` Groovy script to implement complex business logic that enables or disables the menu items. Create this script within SalesOrder object, Object Functions section. Here's how to create the function:

1. Ensure you're working in an active sandbox.
2. Click **Navigator** > **Configuration** > **Application Composer**.
3. Navigate to Sales Orders in Standard Objects.
4. Expand Sales Orders.
5. Click **Server Scripts**.
6. Click **Object Functions**.
7. Click **Add** in the Action drop-down list.
8. In the Create Object Function enter the following:

Field	Details
Function Name	cpqActionMenuPreRender
Returns	Map
Edit Script	<pre>def menuItemsMap = [ORA_ZCA_CPQ_ACTION_EDIT: 'N', ORA_ZCA_CPQ_ACTION_NEW_VERSION: 'Y', ORA_ZCA_CPQ_ACTION_DUPLICATE: 'Y'] return menuItemsMap;</pre>



Field	Details

9. Click **Save and Close**.
10. Test your changes. Go to the Opportunity list page, open a record, click the Quotes and Orders subtab, and check the Actions drop-down list in the quotes row.

## Disable Oracle CPQ Menu Items

The procedure explains how to disable the Create Oracle CPQ menu item for a specific sales order using sales order attributes from groovy function. Here's how you can use your Groovy script and disable a create Oracle CPQ menu item.

1. Ensure you're working in an active sandbox.
2. Click **Navigator > Configuration > Application Composer**.
3. Navigate to Sales Orders in Standard Objects.
4. Expand Sales Orders.
5. Click **Server Scripts**.
6. Click **Object Functions**.
7. Click the **Create** icon to add a new object function.
8. In the Create Object Function page, do as follows:
  - a. Enter `cpqActionMenuPreRender` in the Function Name field.
  - b. Select `Map` in the Returns field.
  - c. Enter this script in the Edit Script field:
 

```
def editDisabled = 'N';
def duplicateDisabled = 'N';
def createVersionDisabled = 'N';
if(Name.equals('Quote1')){
createVersionDisabled = 'Y';
}
def menuItemMap = ['ORA_ZCA_CPQ_ACTION_DUPLICATE':editDisabled,
'ORA_ZCA_CPQ_ACTION_EDIT':duplicateDisabled,ORA_ZCA_CPQ_ACTION_NEW_VERSION :
createVersionDisabled];
return menuItemMap;
```
9. Click **Save and Close**.
10. Create an opportunity and post sales order using REST.
11. Test your changes. Drill down to the opportunity you created and click Quotes and Order subtab and verify that the Create Version menu item is disabled for sales order named Quote1.

## Set Up Reconciliation of Revenue Lines from Quote Lines

When your users activate a quote from the sales application, reconciliation of revenue lines and quote lines is triggered. Reconciliation is the process of rolling up information from quote line into revenue lines.

Quote line information used for configuration of a product is summarized and presented in a roll up view in revenue lines based on the setup you do.

Here are the steps involved in the setup:

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, you can review the opportunity lock time used during the reconciliation process.
4. Map the attributes of CX Sales and Oracle CPQ to sync revenue lines from quote lines.

The first three steps are included in this topic. For the step 4, see *Sales and Oracle CPQ Attributes Mapping to Sync Revenue Lines from Quote Lines*.

## Step 1: Enable the Profile Option

Here are the steps:

1. In the Setup and Maintenance work area, use the **Manage Administrator Profile Values** task.
  - o Offering: Sales
  - o Functional Area: Sales Foundation
  - o Task: Manage Administrator Profile Values
2. On the Manage Administrator Profile Values page, 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.

## Step 2: Set the Reconcile Option for Quote Lines

You have two types of reconcile options for quote lines: Root and Part. If you sell several standalone parts in your business, then the recommendation is to choose Part. Or, if you sell configured products, such as laptops, the recommendation is to choose Root. As an Oracle CPQ administrator, decide on the option during the analysis and implementation phase and set it to Root or Part based on the business need.

**Note:** We recommend that you don't change the reconcile option once set. If you do so, you'll lose all the previous data and can't retrieve it.

Here are the steps:

1. In the Setup and Maintenance work area, use the Manage Oracle CX Sales to Oracle CPQ Cloud Integration task.
  - o Offering: Sales
  - o Functional Area: Integration
  - o Task: Manage Oracle CX Sales to Oracle CPQ Cloud Integration
2. In the Manage Oracle CX Sales to Oracle CPQ Cloud Integration page, in 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.

## Step 3 (Optional): Review Opportunity Lock During Reconciliation

When a salesperson sets a quote to 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 to 120 seconds. If the reconciliation process takes longer than 120 seconds, 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. You can change the default time, if needed. Here are the steps:

1. In the Setup and Maintenance work area, use the Manage Administrator Profile Values task.
  - Offering: Sales
  - Functional Area: Sales Foundation
  - Task: Manage Administrator Profile Values
2. In the Manage Administrator Profile Values page, search for the profile option code, ORA\_MOO\_OPTY\_LOCK\_RELEASE. The default value of Site is set to 120 seconds.
3. If you're changing this value, save your changes and sign in again for the changes to take effect.

## Sales and Oracle CPQ Attributes Mapping to Sync Revenue Lines from Quote Lines

As the final step in setting up the reconciliation of revenue lines from quote lines, verify the mapping of Sales and Oracle CPQ attributes.

Here are the steps to verify the default mapping:

1. In the Setup and Maintenance work area, use the **Manage Oracle CX Sales to Oracle CPQ Cloud Integration** task.
  - Offering: Sales
  - Functional Area: Integrations
  - Task: Manage Oracle CX Sales to Oracle CPQ Cloud Integration
2. In the Manage Oracle CX Sales to Oracle CPQ Cloud Integration page, go to the **Quote Line to Revenue Line Mapping** tab.
3. Verify that the default mapping of CX Sales and Oracle CPQ attributes is intact. Refer to the table here for the standard mapping:

Revenue Attribute Name (CX Sales)	Quote Lines Attribute Name (Oracle CPQ)
InventoryOrgId	InventoryOrgId
InventoryItemId	InventoryItemId
UnitPrice	UnitListPrice
Discount	DiscountPercentage
Quantity	Quantity
UOMCode	UOMCode
NonRecurringRevenue	NonRecurringRevenue
RecurringRevenue	RecurringRevenue

Revenue Attribute Name (CX Sales)	Quote Lines Attribute Name (Oracle CPQ)
UsageRevenue	UsageRevenue
RevAmount	ContractValue
MonthlyRecurringRevenue	MonthlyRecurringRevenue
MonthlyUsageRevenue	MonthlyUsageRevenue
ContractStartDate	ContractStartDate
ContractEndDate	ContractEndDate
RecurStartDate	ContractStartDate
RecurEndDate	ContractEndDate
RevAmountCurcyCode	CurrencyCode
RecurFrequencyCode	PricePeriodCode
RecurNumberPeriods	ContractPeriods

4. If you've made any changes, save them.
5. Sign in again for the changes to take effect.

## Show Price Type on Opportunity Product (Revenue) Lines

Price Type in quotes gives you an idea about the category of your pricing. Typically, quote lines can have three kinds of price types: "one-time", "recurring" and "usage". Example of a one-time price type is an installation charge.

Similarly, monthly subscriptions are an example of a recurring price type. Usage price type is applied to quote lines that are priced based on consumption. You can set up the application to retrieve the Price Type of quote lines during reconciliation and to show it on product (revenue) lines in opportunities.

At the end of a successful reconciliation, if all of your quote lines are one-time, then the product lines show in the Price Type column as One-time. Similarly, after reconciliation, quote lines with recurring or usage Price Type are shown as Recurring and Usage, respectively, in the Products table. However, if your quote lines have different price types, then, on reconciliation, product lines show Price Type as Mixed, indicating that the quote lines have combinations of one-time, recurring, or usage price types.

To show the price type on the revenue lines, enable the profile option, `ORA_MOO_REVN_RECUR_PRICETYPE`, and add the Price Type field to the Opportunity Products (revenue) table and Recurring Schedule pages using Application Composer.

## Enable the Profile Option

Here are the steps:

1. In the Setup and Maintenance work area, use the Manage Administrator Profile Values task:
  - Offering: Sales
  - Functional Area: Sales Foundation
  - Task: Manage Administrator Profile Values
2. On the Manage Administrator Profile Values page, 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 to Yes and save the changes.
4. Sign in again for the changes to take effect.

## Add the Price Type Field to Opportunity Pages

Here's how to add the Price Type field to the opportunity Products table in the Edit Opportunity page:

1. Ensure you're working in an active sandbox.
2. Go to **Configuration > Application Composer > Standard Objects > Opportunity > Pages > Details Page Layouts**.
3. Click the edit icon in the Edit Revenue Table of a detail page layout.
4. Move **Price Type** from Selected Fields to Available Fields.
5. Save your changes.
6. Publish your sandbox according to your company's business practices.

## Enable Revenue Attributes for Revenue Lines and Workspace Search

For salespeople, revenue attributes, such as the recurring revenue, can be very valuable information when reviewing opportunity revenue lines. Salespeople can also use these attributes as filters to search for opportunities in Workspace.

Complete these setups to let your salespeople use revenue attributes effectively:

- Enable opportunity revenue attributes on opportunity revenue lines.
- Add the attributes as filters in Workspace.

## Enable Attributes on Opportunity Revenue Lines

1. Sign in as the sales administrator or as a setup user and create and activate a sandbox.
2. Navigate to **Configuration > Application Composer**.
3. Expand **Opportunity > Opportunity Revenue** and click **Pages**.
4. Find the Details page layout and duplicate the standard layout.
5. Click the **edit** icon beside Revenue Edit Form.
6. Move these attributes from Available Fields to Selected Fields:
  - Price Type
  - Nonrecurring Revenue

- Recurring Revenue
- Usage Revenue

7. Click **Save and Close**.

## Add Attributes as Filters in Workspace

Add the attributes as filters in the Workspace so that your users can use the filters to search for opportunities.

1. In Setup and Maintenance, use the Configure Adaptive Search task:
  - Offering: Sales
  - Functional Area: Sales Foundation
  - Task: Configure Adaptive Search
2. In the navigation pane in the Configure Adaptive Search page, go to **Set up > Advanced**.
3. In Objects Enabled for Adaptive Search, go to **Opportunity > Revenue** and select **Opportunity Revenue**.
4. Enable these attributes:
  - Price Type
  - Nonrecurring Revenue
  - Recurring Revenue
  - Usage Revenue

5. Click **Save**.

6. Go to **Actions** and select **Partial Publish**.

7. Select **Opportunity** in the Partial Publish window and click **Proceed with Partial Publish**.

It might take a while for the application to publish your changes.

Your users can add the new attributes as filters in Workspace and search for opportunities based on their values.

8. Add the revenue attributes as filters to Workspace:
  - a. Navigate to Workspace.
  - b. Click the **edit** icon in Filters.
  - c. In the Edit Filters window, search for Price Type, Recurring Revenue, Non-Recurring Revenue, and Usage Revenue and move them from Available to Selected.
  - d. Click **OK**.

Use the filters to get the list of opportunities you want.

## Add the Custom Currency Type Field to Quotes

You can enable salespeople to enter a currency when creating a quote.

Here's how to add an editable custom currency field:

1. Sign in as the sales administrator or as a setup user and create and activate a sandbox.
2. Navigate to **Configuration > Application Composer**.
3. In the navigation tree, expand **Standard Objects**, and then expand **Sales Order**.
4. Click the **Fields** node.

5. On the Custom tab, select **New** from the Action menu.
6. In the Select Field Type window, select the **Currency** field type and click **OK**.
7. In the Create Currency Field window, enter a display name for the field for example, enter "Currency". Ensure that **Updatable** is checked in Constraints.
8. Click **Save and Close**.
9. Next, expose the new field for quotes (Sales Orders object).
10. Click the **Pages** node in Sales Orders.
11. In the Sales Orders: Pages page, ensure that the Application Pages tab is selected.
12. From the Actions menu, select **Duplicate**.
13. In the Duplicate Layout dialog box, enter a name for the new layout and click **Save and Edit**.
14. In the Landing Page Layout page, click the edit icon next to Fuse Quote Overview Table.
15. In edit mode, find the newly created Currency field in the Available Fields box and move it to the Selected Fields box.
16. Click **Save and Close** and then click **Done**.
17. Verify the changes by signing in as a user with access to the Quotes and Orders pages, such as a sales administrator or salesperson:
  - a. Navigate to **Quotes and Orders** while still in the active sandbox.
  - b. Click **Show Advanced Search**.
  - c. Click **Add**.
  - d. Click **Currency** and add the field.
18. Publish the sandbox.

## Enable Salespeople to Create a Copy from an Opportunity Quote

Configure the ZCA\_SO\_COPY\_QUOTE\_ACROSS\_OPPTY profile option to let the salespeople create a copy of a quote from an opportunity to another.

1. In the Setup and Maintenance work area, use the Manage Administrator Profile Values task.
  - o Offering: Sales
  - o Functional Area: Sales Foundation
  - o Task: Manage Administrator Profile Values
2. On the Manage Administrator Profile Values page, search for the profile option code, ZCA\_SO\_COPY\_QUOTE\_ACROSS\_OPPTY. 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.

## Enable Creating a Quote Automatically from an Opportunity

Set up automatic quote creation to let your salespeople use the auto-generated quotes when negotiating and closing the deals with customers.

The process adds products automatically and generates quotes for opportunities.

## Prerequisites

For a quote to be created successfully by the automatic process, ensure that:

- The opportunities have one or more revenue lines.
- The products or revenue lines are mapped accurately between sales and Oracle CPQ.
- The opportunity doesn't already have a quote associated with it.
- The routine rules are defined accurately by selecting the appropriate attributes and attribute values.
- The approval of quotes in Oracle CPQ isn't set to manual approval.
- You've performed the setups described earlier in this guide in *Oracle Sales Configuration Steps* and *Oracle CPQ Configuration Steps*.

## Renewal Opportunities

### Setting Up Renewal Opportunities

Oracle CPQ checks for subscriptions that are due to expire soon and automatically creates quotes of type Renewal, which in turn create the Renewal opportunities.

These renewal opportunities from Oracle CPQ appear in the Opportunities list of the sales application. However, for your users to distinguish these opportunities as renewals, you must enable the settings listed in this table:

What to Enable	Navigation or Reference
Enable the Revenue Line sync feature	For navigation and details, see the "Set Up Reconciliation of Revenue Lines from Quote Lines" topic in the "Quotes and Orders" chapter in the Implementing Sales guide.
Verify the CX Sales and Oracle CPQ attributes mapping to synchronize revenue lines from quote lines	For navigation and details, see the "CX Sales and Oracle CPQ Attributes to Synchronize Revenue Lines from Quote Lines" topic in the "Quotes and Orders" chapter in the Implementing Sales guide.
Verify the Quote Headers and Opportunity attributes mapping	For navigation and details, see the "Quote Headers and Opportunity Attributes Mapping" topic in the "Quotes and Orders" chapter in the Implementing Sales guide.
Add the Opportunity Type attribute to the custom Landing, Creation, and Details layouts	Application Composer > Standard Objects > Opportunity > Pages.
Add the Revenue Type Category attribute to the Products section of the custom Creation and Details layout of Opportunity	Application Composer > Standard Objects > Opportunity > Pages.



What to Enable	Navigation or Reference
<b>Note:</b> The Revenue Type Category will be set to Renew, based on the renewal quote information provided by the Oracle CPQ.	

**Note:** Your users can create renewal opportunities manually as well.

## Quote Headers and Opportunity Attributes Mapping

The default Quote header and Opportunity attributes mapping enables Oracle CPQ to create and populate renewal quotes as renewal opportunities.

Here are the steps to verify your default mapping:

1. In the Setup and Maintenance work area, use the **Manage Oracle CX Sales to Oracle CPQ Cloud Integration** task.
  - o **Offering:** Sales
  - o **Functional Area:** Integrations
  - o **Task:** Manage Oracle CX Sales to Oracle CPQ Cloud Integration
2. On the Manage Oracle CX Sales to Oracle CPQ Cloud Integration page, go to the **Quote Header to Opportunity Mapping** tab.
3. Verify that the default mapping of CX Sales and Oracle CPQ attributes is intact. Refer to the table here for the standard mapping:

Opportunity Attributes (Sales)	Quote Headers (Oracle CPQ)
Business Unit ID	BuOrgId
Name	Name
Account	SoldCustomerPartyId
Primary Contact	SoldContactPartyId
Owner	OwnerResourcePartyId
Sales Method	Defaulted based on Profile or Business Unit setting

Opportunity Attributes (Sales)	Quote Headers (Oracle CPQ)
Sales Stage	Defaults to the FIRST Sales Method for this Renewal Opportunity
Opportunity Type	QuoteTypeCategory
Renewal Process	RenewalProcess
Currency	CurrencyCode

4. If you have made any changes, save them.
5. Sign in again for the changes to take effect.

## Quote Security

### User Roles for the Quotes Integration

Several of the supplied user roles automatically have access to the quotes functionality. In addition, you can add privileges for partner and custom roles.

#### User Roles That Automatically Have Access to Quotes

The user roles that automatically have access to quotes functionality are:

- Sales Representative
- Sales Manager
- Sales VP
- Sales Administrator
- Channel Operations Manager
- Channel Account Manager
- Channel Sales Manager
- Partner Administrator
- Partner Sales Representative
- Partner Sales Manager

#### Give Access to Quotes to Company-Defined User Roles

To give quotes access to users who have company-defined roles, add the applicable function privileges and data security policies. See the *Securing CX Sales and Fusion Service* guide for more information.

*Related Topics*



# 8 Using Quotes in Classic Sales

## Overview of Using Quotes

Using Oracle classic Sales, salespeople can create quotes and orders from opportunities as part of deals or directly from accounts using the automated opportunity-to-quote-to-order process.

The quotes and orders feature lets salespeople:

- Create professional proposal documents.
- Share quotes and collaborate with customers to close deals.
- View quote summary information and drill down into quotes to view details.
- Create product configurations in the integrated quoting application.
- Perform automated pricing calculations.
- Specify pricing and discounts.
- Streamline approval processes.

## Create Quotes

After the quoting feature is enabled, while working on an opportunity or account, salespeople can create, update, duplicate, and version quotes. They can add and remove products and change pricing. When they're satisfied with a quote, they can save it and then mark that quote as active. When salespeople create, edit, or version a quote, they navigate to the integrated quoting application, Oracle CPQ. The application carries the opportunity ID and account ID into Oracle CPQ, and when they save the quote, Oracle CPQ creates the new quote. When they return to the sales application, the newly created quote displays there, associated with the opportunity or account it relates to.

## Access Quotes

In the Sales work area, salespeople access quotes by:

- Searching for quotes using the global search.
- Navigating to the Quotes and Orders landing page within the Sales work area. (Note: The Quotes and Orders page displays only opportunity-related quotes.)
- Viewing and updating quotes from within an opportunity or an account.

For the quotes salespeople have access to, the details include quote number, quote amount, status, and proposal document.

Salespeople can find quotes on these UIs in classic Sales:

- In an opportunity, on the Quotes and Orders tab that displays only opportunity-based quotes.
- In an account, on the Quotes and Orders tab that displays only account-based quotes.
- On the Quotes and Orders page that displays only opportunity-based quotes.

## Synchronized Opportunity Products and Status

The application automatically synchronizes opportunity products and associated revenue in the quote lines. Marking a quote as active enables the automatic synchronization of the quote lines with the opportunity revenue lines that were the source of that quote.

## Get Started with Quotes and Orders

Salespeople can create quotes and orders from opportunities as part of deals or directly from accounts using the automated opportunity-to-quote-to-order process. From the Quotes and Orders landing page, salespeople can get summary information about the opportunities, accounts, and amounts related to quotes.



Salespeople can get quick access to the quotes they need using the global search. For example, they can search on number, order total, status, and so on. Or they can create their own personal lists.

From the landing page, salespeople can drill into quote details. They can modify quotes in real-time in the quoting application, Oracle CPQ. Let's take an example using a quote for servers. A salesperson can update the quantity of servers, and the application immediately updates the relevant sales figures. In the quoting application, the salesperson simply updates the associated opportunity to sync the changes back to the sales application, and then they return to the sales application for further work.

To see quotes in opportunities, from the Opportunities landing page, salespeople drill into an opportunity and then click the Quotes and Orders tab. From there, they can create new quotes and new versions, edit quotes, or duplicate quotes.

## Create and Update a Quote for an Opportunity

Salespeople can create, view, and share quote information from the opportunities UI through integration with Oracle CPQ.

With opportunity quotes, salespeople can:

- Create professional proposal documents that include current product and pricing information within an existing opportunity.
- Create multiple quotes and orders for an opportunity, including multiple versions for the same quote.

**Note:** Only one quote can be active for an opportunity.

When salespeople create or update a quote or sales order in Oracle CPQ, the associated opportunity, if active, must be updated in the sales application with the same changes. Updates include additions, deletions, and updates to product (revenue) lines on the opportunity.

Other updates, such as issuing the quote to a customer and submitting it as a sales order, are performed only within Oracle CPQ.

## Create a Quote from an Opportunity

When salespeople create a quote from an opportunity in Sales, Oracle CPQ automatically starts. The opportunity ID and account ID are copied to Oracle CPQ, and when they save the quote, Oracle CPQ creates the new quote. When they return to the sales application, the newly created quote is available, associated with the opportunity or account it relates to.

Here's how salespeople create a quote from an opportunity:

1. From the springboard or Navigator, click **Sales > Quotes and Orders**.
2. From the Quotes and Orders landing page, edit an opportunity.
3. From the Edit Opportunity page, click the **Quotes and Orders** tab.
4. Click **Create Quote**, and the application automatically signs you in to Oracle CPQ.
5. In Oracle CPQ, start creating the quote by clicking **Add Line Item**.
6. Enter the remaining quote information.  
See the online help for Oracle CPQ for information about adding line items to a quote.
7. When done, click the **Update Opportunity** tab to sync the changes back to the sales application.

**Note:** Salespeople can create an order only from a quote and not from an opportunity or account.

8. Return to Sales.

## Update Opportunity Products and Status

Salespeople can automatically sync opportunity products and associated revenue with quote lines. Once they're satisfied with a quote, they save it and mark the quote as active. Setting a quote as active enables the synchronization of the quote line items with the opportunity revenue lines.

Here's how to update a quote from an opportunity:

1. From the springboard or Navigator, click **Sales > Quotes and Orders**.
2. From the Quotes and Orders List page, select an opportunity.
3. From the Edit Opportunity page, click the **Quotes and Orders** tab.
4. Locate the quote and click **Edit** from the Actions menu.
5. Now automatically signed into Oracle CPQ, update the quote.
6. Click the **Update Opportunity** tab to sync the changes back to Sales.
7. Return to Sales.

For more information about using Oracle CPQ, see the Oracle CPQ online help.

## Make a Copy from an Opportunity Quote

When selling similar products to different customers, salespeople can make a copy of an existing opportunity quote and reuse the quote lines and other details for another opportunity.

**Note:** Salespeople can make copies from opportunity quotes only. Opportunity quotes are the quotes created from an opportunity.

Here's how to make a copy from a quote:

1. Go to **Quotes and Orders** while in the opportunity or account details pages.

**Note:** From the account details page, salespeople can create a copy only if the quote is associated with an opportunity. They can't copy quotes that are created from accounts without an opportunity associated.

2. Click the Actions icon for the quote to be copied and select **Duplicate**.
3. On the Duplicate Quote window, select the **Opportunity**.
4. Click **Save and Continue**.  
The sales application opens the copied quote in Oracle CPQ.
5. Rename the quote, review the quote lines, update the contact, and make other changes.
6. In Oracle CPQ, click **Save** and then click **Update Sales**.  
When the quote gets closed in Oracle CPQ, the changes reflect in the Sales. The quote shows in the Quotes and Orders page of the opportunity that the quote was copied from.
7. Click **Save and Close**.

## Create and Update a Quote for an Account

While working on an account, salespeople can create, update, duplicate, and version associated quotes to reflect the product and pricing configuration.

Here's how to create a quote from an account:

1. From the springboard or Navigator, click **Sales > Accounts > Quotes and Orders**.
2. From the Quotes and Orders landing page, select an account.
3. In the Edit Accounts page, click the **Quotes and Orders** tab.
4. Click **Create Quote**, and the application automatically signs you into Oracle CPQ.
5. Click **Add Line Item** and start creating the quote
6. Enter the remaining quote information.
7. When done, click the **Update Account** tab to sync the changes.

**Note:** Salespeople can create an order only from a quote and not from an opportunity or account.

8. Return to Sales.

For more information about using Oracle CPQ, see the Oracle CPQ online help.

## Make Quotes Active without Navigating to Oracle CPQ

You can set an inactive quote to active without navigating to Oracle CPQ. Here's how:

Here's how to make a quotes active without navigating to Oracle CPQ:

1. In Sales, edit an opportunity or an account.
2. Go to **Quotes and Orders**.
3. In the Active column, click the tick icon against the quote that should be active. It changes to a green tick, indicating that the quote is active.



- Immediately, the sales application runs a revenue reconciliation process that reconciles the revenue lines from Oracle CPQ quote lines. The scope of the reconciliation process is based on the reconcile option (Root or Part) that the administrator has set.
  - The opportunity is locked until the revenue reconciliation process ends. This means no changes can be made to the opportunity during this time. Once the process ends, the opportunity lock is released.
4. Click the quote name to see the new revenue lines and price type.

**Note:** If the process is interrupted, the quote is set to its previous state. Click Active again after some time to restart the reconciliation.

## Active and Inactive Quotes

If an opportunity has a single quote, that quote is considered active and it can't be inactivated.

If an opportunity has multiple quotes, only one of the quotes can be active at a time. So, when a quote is made active, the previously active quote becomes inactive. However, the information related to inactivated quote -- such as credit split, revenue schedules, and custom attribute information -- remains as is. When this inactive quote is made active again, all of its information comes back.

## Search Quotes and Quote Lines in Workspace

Salespeople can search quote header information and quote line item details in Workspace. They can search for specific products and view quotes that contain the specific products. They can also select a quote and view the quote details in Oracle CPQ.

**Note:** This search applies only to quotes created from opportunities.

Quotes created from opportunities can have multiple quote line items. When salespeople create quotes from opportunities, the application stores line item details, such as product name, quantity, price, and discount percentage.

## How is the number of open quotes on the Quotes and Orders summary calculated?

The Open Quotes and Orders summary on the Account Overview page shows the number of all active and open quotes associated with opportunities. Active and open quotes include those quotes whose Win status is "in-progress".

If a quote has multiple versions, the last version of the quote synchronized with the application is considered an open quote.

## How do salespeople leave Oracle CPQ within Sales?

Salespeople need only refresh the browser window to exit the Oracle CPQ quote application.

## Does the status of a quote or sales order affect opportunity status?

No, the status is primarily used for filtering and analytic purposes and doesn't impact the status of an associated opportunity. The aggregate status of a quote or sales order defines the aggregate status of each quote or sales order and valid values include:

- In progress
- Won
- Lost
- Alternate version
- Deleted

However, if salespeople create or update a quote or sales order in the Oracle CPQ quoting application, the associated opportunity, if active, must be updated in Sales with the same changes. Updates include additions, deletions, and updates to product (revenue) lines on the opportunity.

Other updates, such as issuing the quote to a customer and submitting it as a sales order, are performed only within Oracle CPQ.