

# Oracle CPQ Asset-Based Ordering Release Summary and Upgrade Considerations

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July 2024

## REVISION HISTORY

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

DATE	WHAT'S CHANGED	NOTES
JUL 2024	Oracle CPQ 24C revision	
APR 2024	Oracle CPQ 24B revision	
DEC 2024	Oracle CPQ 24A revision	
SEP 2023	Oracle CPQ 23D revisions	
JUN 2023	Oracle CPQ 23C revisions	
MAR 2023	Oracle CPQ 23B revisions	
FEB 2022	Oracle CPQ 22B revisions	
OCT 2021	Oracle CPQ 21D revisions	
DEC 2020	Oracle CPQ 21A revisions	
SEP 2020	Oracle CPQ 20A revisions	
JUL 2019	Oracle CPQ 19B revisions	
MAR 2019	Oracle CPQ 18D revisions	
JUL 2017	Oracle CPQ 2017 R1 revisions	
NOV 2016		Initial Document Creation, Oracle CPQ 2016 R1

## OVERVIEW

In general, all ABO packages from prior releases should continue to work. You only need to apply a new package if you need to uptake the new features from the new release. In some cases, if the changes are minor, you could manually modify the line changes yourself in your current environment without importing the new package. The following section lists changes to the Asset-Based Ordering features since the initial release and should help you decide whether or not you should uptake a new release. The 19B implementation package is the last effective released package. All recent releases can directly use 19B package leveraging cross-version migration.

### KEY RESOURCES

My Oracle Support (MOS)

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## FEATURE SUMMARY

RELEASE UPDATES	ACTION REQUIRED
<b>Oracle CPQ 24C</b>	
There are no changes to the ABO implementation package specific to Oracle CPQ 24C.	There are no new changes in the ABO implementation package. Customers can continue to implement ABO_RefApp_Package_2024B.
<b>Oracle CPQ 24B</b>	
<p>Oracle CPQ ABO Package 24B is the latest published package for the new RefApp Commerce process that is based on the new Commerce Standard Process included with release 24B onwards.</p> <p>Oracle CPQ 24B includes an update to the ABO RefApp Package.</p>	<p>When upgrading to the 24B ABO platform release, consider the following points in addition to the information in the previous implementation package sections (24A, 23D, 23C, 23B, etc.).</p> <p>The artifacts included in the 24B ABO implementation package are similar to those available in 24A ABO implementation package, except for minor updates to the following Util libraries:</p> <ul style="list-style-type: none"><li>• abo_copyRootToTransaction</li><li>• abo_generatePAC</li></ul> <p>Customers already using Asset-Based Ordering and NOT implementing the new Commerce Standard Process, that want to upgrade to the Oracle CPQ 24B platform release, can continue to use the 21A ABO or earlier implementation packages.</p> <p>For customers implementing the new Commerce Standard Process, upgrading to Oracle CPQ 24B platform release, importing the 24B ABO implementation package is optional. But post-upgrade if there is a need to import the ABO package, then it is recommended to use the 24B ABO implementation package.</p> <p>Customers implementing the new Commerce Standard Process for the first time, must import the new 24B ABO implementation package and optionally merge their customization manually to the new package after careful planning and testing during implementation.</p>

RELEASE UPDATES	ACTION REQUIRED
<p><b>Oracle CPQ 24A</b></p> <p>Oracle CPQ ABO Package 24A is the latest published package for the new RefApp Commerce process that is based on the new Commerce Standard Process included with release 24A onwards.</p> <p>Oracle CPQ 24A includes an update to the ABO RefApp Package.</p>	<p>When upgrading to the 24A ABO platform release, consider the following points in addition to the information in the previous implementation package sections (23D, 23C, 23B, etc.).</p> <p>The artifacts included in the 24A ABO implementation package are similar to the ones available in 23D ABO implementation package, except for a minor update to Util library - <code>abo_getProductModellInfo</code>.</p> <p>Customers already using Asset-Based Ordering and NOT implementing the new Commerce Standard Process, that want to upgrade to the Oracle CPQ 24A platform release, can continue to use the 21A ABO or earlier implementation packages.</p> <p>For customers implementing the new Commerce Standard Process, upgrading to Oracle CPQ 24A platform release, importing the 24A ABO implementation package is optional. But post-upgrade if there is a need to import the ABO package, then it is recommended to use the 24A ABO implementation package.</p> <p>Customers implementing the new Commerce Standard Process for the first time, must import the new 24A ABO implementation package and optionally merge their customization manually to the new package after careful planning and testing during implementation.</p>
<p><b>Oracle CPQ 23D</b></p> <p>Oracle CPQ ABO Package 23D is the latest published package for the new RefApp Commerce process that is based on the new Commerce Standard Process included with release 23D onwards.</p> <p>Oracle CPQ 23D includes an update to the ABO RefApp Package.</p>	<p>When upgrading to the 23D ABO platform release, consider the following points in addition to the information in the 23C ABO Implementation Package and 23B ABO Implementation Package section.</p> <ul style="list-style-type: none"> <li>• Most of the artifacts included in the 23D ABO implementation package are similar to the ones available in 23B and 23C ABO implementation package except for the following new enhancements: <ul style="list-style-type: none"> <li>○ Beginning in Oracle CPQ 23C, sales users can add products with fixed structures (BOM hierarchies) to a transaction using Quick Add functionality. A product is considered to have a fixed structure when it is associated to a root BOM item and does not have a model configuration defined with it.</li> <li>○ To support this functionality, couple of minor changes have been made to the following artifacts in the 23D ABO package: <ul style="list-style-type: none"> <li>▪ Util library - <code>abo_getConfigurationInstance</code></li> <li>▪ Commerce Library Function - <code>oRCL_abo_PostDefaultsOnLineItems</code></li> </ul> </li> <li>○ Customers who are already using 23B or 23C ABO implementation package can optionally implement the above changes manually by comparing the implementation differences in the above two library functions after reviewing <code>ABO_Final_BML_Actions_23D.zip</code>.</li> </ul> </li> </ul>

RELEASE UPDATES	ACTION REQUIRED
	<ul style="list-style-type: none"> <li>Customers already using Asset-Based Ordering and NOT implementing the new Commerce Standard Process, that want to upgrade to the Oracle CPQ 23D platform release, can continue to use the 21A ABO or earlier implementation packages.</li> <li>For customers implementing the new Commerce Standard Process (available in Oracle CPQ 23B platform release onwards), upgrading to Oracle CPQ 23D platform release, importing the 23D ABO implementation package is optional. But post-upgrade if there is a need to import the ABO package, then it is recommended to use the 23D ABO implementation package.</li> <li>Customers implementing the new Commerce Standard Process (available in Oracle CPQ 23D platform release) for the first time, must import the new 23D ABO implementation package and optionally merge their customization manually to the new package after careful planning and testing during implementation.</li> </ul>
<b>Oracle CPQ 23C</b>	
<p>Oracle CPQ ABO Package 23C is the latest published package for the new RefApp Commerce process that is based on the new Commerce Standard Process included with release 23C onwards.</p> <p>Oracle CPQ 23C includes an update to the existing ABO RefApp Package.</p>	<p>When upgrading to the 23C ABO platform release, consider the following points in addition to the information in the <a href="#">23B ABO Implementation Package</a>, <a href="#">Upgrading to the 21A or Later ABO Implementation Package from 19B and Earlier Implementations</a> and <a href="#">Upgrading to 18D and Later ABO Implementation Packages from Earlier Implementations</a> sections.</p> <ul style="list-style-type: none"> <li>There are no new changes included in the 23C ABO implementation package. The artifacts included in the 23C ABO implementation package are similar to the ones available in 23B ABO implementation package.</li> <li>Customers already using Asset-Based Ordering and <b>NOT</b> implementing the new Commerce Standard Process, that want to upgrade to the Oracle CPQ 23C platform release, can continue to use the 21A ABO or earlier implementation packages.</li> <li>For customers implementing the new Commerce Standard Process (available in Oracle CPQ 23B platform release onwards), upgrading to Oracle CPQ 23C platform release, importing the 23C ABO implementation package is optional. But post-upgrade if there is a need to import the ABO package, then it is recommended to use the 23C ABO implementation package.</li> <li>Customers implementing the new Commerce Standard Process (available in Oracle CPQ 23C platform release) for the first time, must import the new 23C ABO implementation package and optionally merge their customization manually to the new package after careful planning and testing during implementation.</li> </ul>

RELEASE UPDATES	ACTION REQUIRED
<b>Oracle CPQ 23B</b>	
<p>Oracle CPQ 23B introduces the Standard Process for new Oracle Sales integrated site installations. This feature only effects new ABO implementations using the Standard Process. There is no change to existing ABO implementations.</p>	<p>Customers already using Asset-Based Ordering that want to upgrade to the Oracle CPQ 23B platform release, can continue to use the 21A ABO or earlier implementation packages.</p> <p>Customers implementing the new Commerce Standard Process (available in Oracle CPQ 23B platform release), <b>must</b> import the new 23B ABO implementation package and optionally merge their customization manually to the new package after careful planning and testing during implementation.</p> <ul style="list-style-type: none"> <li>• CPQ delivers a new ABO implementation package in Oracle CPQ 23B to support the new Commerce Standard Process. The Standard Process simplifies administrator setup for new ABO implementations by providing a pre-defined set of ABO-related Commerce attributes, actions, library functions, and data columns.</li> <li>• Customers can import the new 23B ABO implementation package to add additional content such as Commerce library functions and util libraries.</li> <li>• Customers can make UI layout changes by adding attributes and actions as per their requirements.</li> <li>• Implementation details that are not relevant while using the new Commerce Standard Process and the latest 23B ABO Implementation package are noted in the <i>Oracle CPQ ABO Implementation Guide</i>.</li> <li>• All other sections are relevant and should be reviewed carefully during implementation.</li> </ul>
<b>Oracle CPQ 23A</b>	
No ABO updates this release.	None
<b>Oracle CPQ 22D</b>	
Beginning in Oracle CPQ 22D, a "_c" suffix will be appended to the variable name provided by the administrator. Prior to Oracle CPQ 22D, custom asset field variable names had a "_asset_custom_" prefix.	None
<b>Oracle CPQ 22C</b>	
Oracle CPQ 22C provides a significant increase in the number of asset fields, including in the size of string type fields. This update also makes asset field administration consistent with other CPQ items.	None

RELEASE UPDATES	ACTION REQUIRED
<b>Oracle CPQ 22B</b>	
<p>Oracle CPQ 22B extends delta pricing functionality to include projected assets.</p>	<p>There is not a specific 22B ABO Implementation package. If Commerce Delta Pricing for ABO is enabled and your site uses the default sub-document "netAmount_1" attribute, you don't need to do anything to enable Commerce Delta Pricing for Projected Assets.</p> <ul style="list-style-type: none"> <li>• If Commerce Delta Pricing for ABO is not enabled, refer to the <i>Oracle CPQ ABO Implementation Guide &gt; B5.3: Delta Pricing for ABO - Enable Commerce Delta Pricing for ABO</i>.</li> <li>• If your site uses a custom sub-document Net Amount attribute, refer to the <i>Oracle CPQ ABO Implementation Guide &gt; B5.3: Delta Pricing for ABO - Commerce Delta Pricing for Projected Assets</i>.</li> </ul>
<b>Oracle CPQ 22A</b>	
<p>No ABO updates this release.</p>	<p>None</p>
<b>Oracle CPQ 21D</b>	
<p>21D introduced the following enhancements:</p> <ul style="list-style-type: none"> <li>• <b>Reconfigure Child Models from the Line Item Grid:</b> Provides the ability to directly reconfigure child system models from the Line Item Grid in the Transaction UI.</li> <li>• <b>Commerce Delta Pricing for ABO:</b> Provides a sub-document Delta Pricing Attribute Set and a Commerce library function to extend the delta pricing to Oracle CPQ Commerce transactions for ABO sites.</li> <li>• <b>Search Projected Assets by Customer REST API:</b> Provides a consolidated list of fulfilled and pending order asset lines in a hierarchical list for a specific customer. In addition, users can perform search and sort operations on the consolidated list of projected assets.</li> </ul>	<p>There is not a specific 21D ABO Implementation package. Review the following options to identify steps to enable these features:</p> <ul style="list-style-type: none"> <li>• <b>Reconfigure Child Models from the Line Item Grid:</b> To enable this feature adopt main and sub-document Reconfigure action changes from the ABO_Final_BML_Actions_21D.zip. Refer to the <i>Oracle CPQ ABO Implementation Guide &gt; B5.4: Reconfigure Child Models from the Line Item Grid</i>.</li> <li>• <b>Commerce Delta Pricing for ABO:</b> To enable this feature, refer to the <i>Oracle CPQ ABO Implementation Guide &gt; B5.3: Delta Pricing for ABO - Enable Commerce Delta Pricing for ABO</i>.</li> </ul>
<b>Oracle CPQ 21C</b>	
<p>No ABO updates this release.</p>	<p>None</p>
<b>Oracle CPQ 21B</b>	
<p>Oracle CPQ 21B introduced delta configuration pricing inside the Configuration UI when implemented with ABO.</p>	<p>To implement this feature, your site must have an ABO Implementation Package 18D or later installed.</p>

RELEASE UPDATES	ACTION REQUIRED
<b>Oracle CPQ 21A</b>	
<p>The 21A package provides a business-level time zone setting for date translation between Commerce and assets instead of the server default time zone.</p>	<p>Installation of the 21A ABO package is optional. Install the 21A ABO package if you have not previously installed an ABO package and want to implement the business-level time zone setting. If you want to implement business-level time zone setting on an environment that already has the ABO package installed, refer to the <i>Oracle CPQ A Implementation Guide &gt; B5.1: Business Time Zone Setting for ABO</i>.</p>
<b>Oracle CPQ 20C</b>	
<p>No ABO updates this release.</p>	<p>None</p>
<b>Oracle CPQ 20B</b>	
<p>No ABO updates this release.</p>	<p>None</p>
<b>Oracle CPQ 20A</b>	
<p>No ABO updates this release.</p> <p><b>LIMITATION</b> Beginning in 20A, CPQ limits the amount of data that can be saved when using the usersessionset BML function, which affects ABO Diagnosis Logs.</p>	<ul style="list-style-type: none"> <li>• Refer to the <i>Oracle CPQ ABO Implementation Guide &gt; C2.3 Override abo_adddiagnosticinfo Work Around</i>.</li> <li>• Use the 19B ABO Implementation Package to install ABO on sites running Oracle CPQ 20A.</li> </ul>
<b>Oracle CPQ 19D</b>	
<p>No ABO updates this release.</p>	<p>The migration version limitation in CPQ 19C was removed in CPQ 19D. Use the 19B ABO Implementation Package to install ABO on sites running Oracle CPQ 19D.</p>
<b>Oracle CPQ 19C</b>	
<p>Beginning in Oracle CPQ 19C, the JET Configuration UI supports Modify, Follow-on Order, and Reconfigure operations for ABO.</p>	<ul style="list-style-type: none"> <li>• The JET Configuration UI is certified for 19B and later ABO packages, earlier packages require a manual override to use the JET Configuration UI.</li> <li>• Due to a migration version limitation in CPQ 19C, customers must use the 19C ABO Implementation Package to install ABO on 19C sites.</li> </ul>



RELEASE UPDATES	ACTION REQUIRED
<b>Oracle CPQ 19B</b>	
<p>19B introduced the following updates:</p> <ul style="list-style-type: none"> <li>• Select multiple assets to modify, renew, resume, suspend, or terminate.</li> <li>• Enable Simple Product Support for Subscription Ordering to directly add products not associated with related configuration models to a transaction for an asset-based order.</li> <li>• New Transaction support for asset-based operations allows customers to invoke an asset operation for an asset without an associated Transaction ID and creates a new transaction associated with the requested operation.</li> </ul>	<ul style="list-style-type: none"> <li>• You must install the ABO Implementation Package for Updates 19B and Later to use the multi-select for modify operations and new transaction support for asset-based operations.</li> <li>• Multi-select renew, resume, suspend, and terminate operations will work with older packages.</li> <li>• CPQ 19B provides Simple Product Support, but this feature must be enabled.</li> </ul> <p><b>IMPORTANT:</b> The JET Configuration UI is not compatible with ABO or System Configuration in CPQ 19B. Do NOT use the JET Configuration UI with ABO in CPQ 19B.</p>
<b>Oracle CPQ 19A</b>	
<p>Minor updates to support Subscription Management only.</p>	<p>None</p>

## RELEASE UPDATES

## ACTION REQUIRED

### Oracle CPQ 18D

18D introduced the following updates:

- System Configuration models available for internal and external ABO implementations
- Retain Configuration attributes in ABO flows without mapping the attributes in BOM tables
- Use Get Configurations SOAP API to return attribute values and price information after a Renew operation
- Perform Suspend and Resume actions on child / grandchild items
- Reconfigure an asset after Resuming or Renewing the asset

**New system variable:** `_supplier_company_name`

**New library functions:** `applybom`, `calculatedeltabom`, and `calculateconfiguration`

**Note:** In the 18D ABO Implementation package, `_line_bom_id` no longer stores the asset key and `_line_bom_parent_id` no longer stores the parent asset key.

#### DEPRECATED ITEMS

- The `abo_apply*` and `abo_process*` functions are deprecated in the 18D ABO Implementation Package.
- Asset operations: `copyConfigurationInstance` and `getConfigurationInstance`.

To use the 18D enhancements, administrators must install the 18D ABO Implementation Package.

**Note:** When upgrading from releases prior to 18D, administrators must ensure their ABO items do not rely upon the asset key in `bom_id` fields. These instances must be updated to reference the `lineinstanceid_1`.

Beginning in 18D, the latest rest service version is always invoked. The `getConfigurationInstance` and `copyConfigurationInstance` operations no longer function since they were deprecated in 2017 R1 and are only available in rest services v3 or earlier. Even though these operations are still available in the UI Designer layout editor, they cannot be used in the UI.

### Oracle CPQ 18C

18C introduced the following updates:

- Token-based authentication to allow Oracle CX Commerce self-service users to securely access CPQ to modify an asset-based Configuration without a user session.
- **New BML Function:** `abo_updateAsset`
- **Additional Security Access Tokens:** `accessTokenData`, `accessToken`, and `publicKeyVarName`

To use the 18C updates, install the 18C ABO Implementation Package or later and merge your customizations from earlier releases.

-- or --

Manually modify the ABO items with updates. Refer to the *Integrating Oracle CX Commerce and Oracle CPQ Implementation Guide* to set up token-based authentication.

**IMPORTANT:** System Configuration and ABO are not compatible in CPQ 18C. Do NOT enable both of them on the same site.

RELEASE UPDATES	ACTION REQUIRED
<b>Oracle CPQ 18B</b>	
<p>18B introduced the following updates:</p> <ul style="list-style-type: none"> <li>Use additional URL parameters to directly launch configuration UI for ABO operations for authenticated user</li> </ul> <p><b>Note:</b> Only authenticated users who are logged in to the application can use the additional URL parameters to directly launch the configurator.</p> <ul style="list-style-type: none"> <li><b>Additional Parameters:</b> assetKey, transactionDate, sourceIdentifier, and id</li> <li>Fixed ABO package bugs to handle null values for status, quantity, and attributes in assets</li> </ul>	<p>To implement the bug fixes for null values, install the 18B ABO Implementation Package or later and merge your customizations from earlier releases.</p> <p>-- or --</p> <p>Manually modify the ABO items with updates.</p> <p><b>IMPORTANT:</b> System Configuration and ABO are not compatible in CPQ 18B. Do NOT enable both of them on the same site.</p>
<b>Oracle CPQ 18A</b>	
<p>18A introduced the Alta Transaction UI.</p>	<p>Install the 18A ABO Implementation Package and merge your customizations from an earlier release</p> <p>-- or --</p> <p>Manually modify ABO items with updates</p> <p><b>IMPORTANT:</b> System Configuration and ABO are not compatible in CPQ 18A. Do NOT enable both of them on the same site.</p>
<b>Oracle CPQ 17D</b>	
<p>2017 R2 introduced Asset Schema Extensibility.</p>	<p>No actions are required to implement this change.</p>
<b>Oracle CPQ 2017 R2</b>	
<p>2017 R2 introduced the following updates:</p> <ul style="list-style-type: none"> <li>Expose Suspend / Resume buttons on the Customer Assets page.</li> <li>Customize the title of the Customer Assets page.</li> </ul>	<ul style="list-style-type: none"> <li>No actions are required to add the Suspend and Resume buttons.</li> <li>To customize the title of the Customer Assets page, install the 2017 R2 ABO Implementation Package or manually modify the Customer Assets action script to get customer name.</li> </ul>
<b>Oracle CPQ 2017 R1</b>	
<p>2017 R1 introduced the following updates:</p> <ul style="list-style-type: none"> <li>Use of namespace</li> <li>REST APIs to allow integration with external applications such as Oracle Commerce Cloud.</li> </ul> <p><b>DEPRECATED ITEMS</b></p> <p>Update Asset script is no longer available.</p>	<ul style="list-style-type: none"> <li>Install the 2017 R1 ABO Implementation Package and merge customizations from earlier releases.</li> <li>Use Asset REST APIs to update order line status and to create or update assets.</li> <li>Modify the main and sub-document Reconfigure actions.</li> </ul>

RELEASE UPDATES	ACTION REQUIRED
<b>Oracle CPQ 2016 R2</b>	
No ABO updates this release.	None
<b>Oracle CPQ 2016 R1</b>	
Initial release of Asset-Based Ordering.	The 2016 R1 ABO Implementation Package has been deprecated.

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