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Preface

These release notes provide an overview of the enhancements, known issues, and other changes in this release.

Audience

Oracle Utilities Application Framework Release Notes is intended for anyone installing or using Oracle Utilities Application Framework.

Related Documents

For more information, refer to these Oracle documents:

Administration and Business Process Guides

- Oracle Utilities Application Framework V4.3.0.0 Administration Guide
- Oracle Utilities Application Framework V4.3.0.0 Business Process Guide

Conventions

The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><em>italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td><code>monospace</code></td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
This document provides general information about this release of Oracle Utilities Application Framework, including new functionality, known issues, and other important information.

Refer to the quick install guide and the installation guide for information regarding supported platforms and installation steps.

This section includes the following:

• Release Overview
• New Features and Enhancements
• Known Issues

Release Overview

This section contains general information about this release of Oracle Utilities Application Framework version 4.3.0.0.

Please visit My Oracle Support (http://support.oracle.com) and Oracle Software Delivery Cloud (http://edelivery.oracle.com/) for the most recent service packs and patches for Oracle Utilities Application Framework V4.3.0.0 to ensure you have the most current version of this product.

Supported Platforms

For supported platforms information, refer to the Quick Installation Guide for the edge product(s) that are installed with this version of Oracle Utilities Application Framework.

Supported Upgrades

For upgrade path information, refer to the Release Notes for the edge product(s) that are installed with this version of Oracle Utilities Application Framework.
New Features and Enhancements

This section describes new and enhanced features in this release of Oracle Utilities Application Framework, including:

- User Interface Enhancements
- Miscellaneous Enhancements
- Configuration Tools Enhancements
- To Do Enhancements
- Portal/Zone Enhancements
- External System Integration Enhancements
- Security Enhancements
- COBOL No Longer Supported
- Application Viewer Changes
- XAI Update Details
- System Data Update Details

User Interface Enhancements

The following topics highlight enhancements to the user interface.

Change to the Application Look and Feel

The general look and feel of the application has changed. The following points highlight some of the changes.

- The font size has been increased.
- New images have been introduced for many icons in the system.
- The color schemes have changed.

These changes make it easier to support accessing the application from different types of devices, where touching the screen is a common form of selecting and launching information.

Changes to the Actions/Navigation Area

Several changes have been made to the Actions/Navigation area in this release.

Changes to Menu Behavior

Several changes have been made to the behavior of the Main Menu and the Admin Menu.

- In previous releases, the menus were accessed using a vertical bar on the left side of the page area. The "active" menu available in the menu bar was chosen using a Menu dropdown in the Actions/Navigation area (where the user could choose to make the Main Menu or the Admin Menu the "active" menu). In this release, the menu bar is no longer used. In addition, rather than a menu dropdown to select Main Menu or Admin Menu, the Actions/Navigation area now includes separate icons for the two menus. Clicking the icon opens each menu directly.
- In previous releases, if a menu entry supported both "search" and "add" modes, the menu would be shown with a "plus" sign on the menu entry beside the menu label. The user would click the menu label to enter the page in "search" mode and would click the "plus" sign to add a new entry for the maintenance object represented by the menu entry. In this release, if both "search" and "add" are supported for a given menu entry, a submenu with the explicit choices
of Add and Search appear for the user to choose. If a menu entry does not support Add, then the user simply clicks on the menu label to launch the page.

**User Menu Created**

In this release, the Preferences link and the Logout link, which used to be separate hyperlinks in the navigation area, are now entries in a dropdown under the logged in user’s name. This is referred to as the User Menu.

In addition, the information is now defined using menu metadata. This allows an edge product or implementation to add additional menu entries to the user menu, if desired.

**Page Title Moved**

In previous releases the title of the page was positioned in the center of the actions and navigation area. In this release, the page title has been moved closer to the object display area, directly above the "Main" tab.

**Actions Moved to Page Area**

In this release, the following actions have been moved from the actions/navigation area:

- Save
- Duplicate
- Delete
- Clear
- Refresh
- Previous Item
- Next Item

These actions are now found in the Page title area. Also note that the Previous Item and Next Item were previously icons. In this release, they are now buttons with the text Previous Item and Next Item.

**Next/Previous To Do Icons Moved to Current To Do Zone**

In this release, the Previous To Do and Next To Do icons have been changed to buttons and are now found in the Current To Do dashboard zone.

**Page Actions**

In this release, some actions that were previously found in the header of a zone on a portal, such as Add and Go To Search, have been moved to be visible in the Page area where Clear and Refresh and other buttons are now shown.

This information is configurable using new Portal Options functionality. One of the base delivered option types is a Page Action Menu. In conjunction with this, a new menu type Page Action Menu has been introduced. The framework provided portals have been updated to include actions in the Page Action area that were formerly found in the header of one of the zones on the portal.

- In previous releases, the main zone of a standalone maintenance portal included a Go To Search hyperlink. Clicking it would navigate to the query page that is associated with the maintenance object. In this release the following portals have been updated to configure a Search button in the Page Action area and the Go To Search hyperlink has been removed from the zone header area. Also note that if any of the portal pages include a log tab, the Search button is also accessible from the Log tab. This is an enhancement from the previous release where the Log tab did not provide the ability to navigate to the Search portal directly.
  - Attachment
New Features and Enhancements

- Bucket Configuration
- Bundle Export
- Bundle Import
- Extendable Lookup
- Inbound Web Service (and its Log portal)
- Migration Data Set Export (and its Log portal)
- Migration Data Set Import (and its Log portal)
- Migration Plan
- Migration Request
- Request
- Revision History
- Sync Request (and its Log portal)
- Web Service Adapter (and its Log portal)
- Web Service Annotation Type

Note that in addition, the above maintenance portals have also been configured to include an Add button to allow a user to initiate adding a new record after viewing an existing record. This is an enhancement from the previous release where the maintenance portals did not provide the ability to Add. A user was required to navigate back to the query portal or use the menu structure to initiate adding a record. The exceptions to this are Revision History and Sync Request, which do not support adding a record in this way.

- In previous releases, the main search zone of a separate query portal included an Add hyperlink. In addition, All-in-One portals included an Add hyperlink it its List zone. In this release, the following portals have been updated to configure an Add button in the Page Action area and the Add hyperlink has been removed from the zone header area.

  - Attachment Query
  - Bucket Configuration Query
  - Bundle Export Query
  - Bundle Import Query
  - Inbound Web Service Query
  - Migration Data Set Export Query
  - Migration Data Set Import Query
  - Migration Plan Query
  - Migration Request Query
  - Request Query
  - Request Type
  - Web Service Adapter Query
  - Web Service Annotation
  - Web Service Annotation Type Query
**Bookmarks Introduced**

In this release, the product has implemented a Bookmark action in the Page Area. Clicking this button allows a user to bookmark the page along with the data that is displayed on the page. The user may choose to name the bookmark as desired.

Existing bookmarks are visible in a new Bookmarks dashboard zone. The zone allows you to navigate to the bookmarked page or delete the bookmark.

Users may also manage existing bookmarks on the user page using a new Bookmarks tab. The bookmark name may be modified; the sequence may be adjusted or the bookmark may be deleted.

**Security.** Note that the bookmark button and the bookmark dashboard zone are secured using an application service ([F1-BOOKMARKS]). Implementations must grant access to this application service in order for their users to access this functionality.

**Maintenance Portals Show Information String**

As mentioned in Portal Options, options have been added to the Portal. One of the base delivered option types is a Foreign Key reference. Configuring a portal with the FK Ref option populates the info string after the title.

The following portals were updated for this behavior:

- Attachment
- Bucket Configuration
- Bundle Export
- Bundle Import
- Inbound Web Service
- Inbound Web Service Log
- Migration Data Set Export
- Migration Data Set Import
- Migration Data Set Import Log
- Migration Data Set Export Log
- Migration Object Import
- Migration Object Log
- Migration Plan
- Migration Request
- Migration Transaction Import
- Migration Transaction Log
- Request
- Sync Request
- Sync Request Log
- Web Service Adapter
- Web Service Adapter Log
- Web Service Annotation Type

Note that All-in-One portals that show a zone with a list of records and then use the broadcast function to display a selected record were not configured with this capability.
New Features and Enhancements

Checkbox Support for UI Auto-rendering

In this release, UI auto-rendering logic has been enhanced to support displaying a checkbox for elements. This can be accomplished by defining an element with a data type of Boolean or referring to a field that is defined as a 'switch'.

Ability to Save Multiple Search Criteria for Queries

In previous releases, the explorer menu provided the ability for a user to "Save Preferences" for a query zone. This allowed a user to capture preferred filter values for a given query zone.

In this release the functionality has been expanded:

- Users may save multiple search preferences for a given query zone, providing meaningful names for each. Note that for a multi-query zone with several search options available in the dropdown, the list of saved searches is available at the "header" (multi-query zone) level allowing the user to choose a different saved search that will change the search option and load the filter criteria in one click.
- Users may designate one of those searches as the default search used when first entering the query zone from the menu.
- Users may choose to add the saved searches to a Favorite Searches dashboard zone. This allows for the user to drill to that query portal and load the desired saved search in one click.

Security. Note that the new favorite searches dashboard zone and the ability for a user to save searches on a query zone are secured using an application service (F1_USRFAVSCH). Implementations may choose to configure whether or not users are permitted to save searches (and have access to the favorite searches zone).

Upgrade Note. In the previous release the ability to "save preferences" was not secured. To maintain this capability for existing users, an upgrade script links this application service F1_USRFAVSCH to all user groups in the system. Implementations may review the user groups and remove the security if desired.

Note that the saved searches capability is not tied to a Profile User. If a user's portal preferences and/or favorite links/scripts are configured via a Profile User, they will still be able to save their own searches. This is a change from the "save preferences" functionality where a user would not be able to save their own search preferences if linked to a Profile User. In addition, in previous releases, the user would see the saved preferences of the Profile User. In this release, saved searches are unique to a user. No preferences from a profile user are inherited. As mentioned, security may be used to limit a user's ability to save their own preferences.

Miscellaneous Enhancements

The following sections highlight miscellaneous enhancements introduced in this release.

Time Zone Required on Installation Options

In previous releases, the time zone field on installation option was an optional field. However, for supporting external messages received from or sent to other application, the system's time zone is needed. Given that most implementations support external messages in some manner, validation has been added to require Time Zone on installation.

Script Detailed Description

A detailed description field has been added to the Script object allowing for more information about the purpose and behavior of a script.
**Message Parameter Value Size Increase**

In this release the message parameter size has been increased from 30 to 2000. This allows for parameters to contain longer text fields like a description or comments.

The following fields were impacted:

- MSG_PARM_VAL
- MESSAGE_PARM
- MESSAGE_PARM1
- MESSAGE_PARM2
- MESSAGE_PARM3
- MESSAGE_PARM4
- MESSAGE_PARM5
- MESSAGE_PARM6
- MESSAGE_PARM7
- MESSAGE_PARM8
- MESSAGE_PARM9

Any implementation that has included any of the above fields in a custom table will be required to perform an ALTER TABLE action. For example:

```
ALTER TABLE <table name> MODIFY (<field name> VARCHAR2(2000))
```

**Support for Detection of Device in Use**

In this release, the product provides support for determining the type of device being used to launch the application. For example, it detects if the device is a tablet, a desktop or a phone.

This functionality lays the groundwork for the ability to customize the look and feel of the user interface based on the type of device the user is connecting from.

**Likeable Search Supported for Data Explorer Zone from a Business Service**

A user filter in a data explorer zone supports configuration to indicate that the search should be "likeable". However, the configuration only applied with the zone was used via a portal where a user enters a filter value. If the zone was instead invoked via a "data explorer" business service, the likeable configuration was ignored. In this release, the Likeable configuration will now be applied when the zone is invoked from a BS.

**Upgrade Note:** If your implementation has any existing zones invoked from a business service where a user filter is configured as "likeable", this configuration will now be applied where it wasn't before. The assumption is that this is an unusual scenario. If the "likeable" configuration was set, the assumption is that it was desired. If that setting is not desired, the zone should be updated accordingly.

**New 'Number/Amount Formatter' Business Service**

In this release, a new business service has been introduced that receives a number or amount and formats it according to the user's display profile. Refer to the detailed description of business service F1-NumberAmountFormatter for more information.

**Configuration Tools Enhancements**

The following topics highlight enhancements to various configuration tool object functionality.
New Features and Enhancements

**Action Provided to BO Status Plug-in Spots**

In this release, the action (A-Add, U-Update) is now passed to algorithms plugged into the BO Enter and BO Exit plug-in spots. This allows for algorithms to execute logic differently based on the action.

**Extendable Lookup Usage Label**

All base delivered extendable lookup business objects include a flag to mark the lookup value as Active or Inactive. The label of this field has been changed from "Usage Flag" to "Status".

**Ability to Provide Prefix Path when Configuring Include Map in UI Hints**

A UI map supports the ability to include a map fragment and optionally define an XPath prefix (using the prefixPath attribute). This causes the specified prefix to be appended to various XPath attribute values, including oraField, oraLabel, oraList, etc. (Defined in the Valid HTML attributes Tips from the UI Map page).

In this release, UI Hint syntax has been enhanced to also support a prefix path for the includeMap attribute.

**To Do Enhancements**

**New 'Complete To Do' Business Service**

In this release, a new business service has been provided F1-CompleteToDoEntry. Callers to the business service may indicate whether or not the user should be valid for one of the To Do entry's roles.

**Portal/Zone Enhancements**

In this release, several enhancements were made to portals and zones.

**Portal Options**

In this release, options have been added to the Portal maintenance object. They work in a similar way to MO options and BO / BO Status Options. The product may supply base owned options. Implementers may introduce options to base owned portals. Implementations may also introduce additional portal option types.

The base product delivers some base option types for some specific purposes. Refer to the topics Page Actions and Maintenance Portals Show Information String for more information.

**Charts**

In previous releases, the product supported html to configure a graphical representation of an xml list, such as pie charts, line graphs, etc.

In this release enhancements have been made to the chart functionality.

The technical implementation of the chart functionality has been changed to use the Oracle Jet JavaScript library of components. This allows the product to leverage various features of that technology, including multiple browser compatibility; configurable legends, colors and tooltips; multi-lingual support for any text that is displayed and proper localization for display of dates, currencies and numbers.

The existing HTML attributes of oraChart, oraChartSeriesN and oraChartBroadcast will continue to be the mechanism used to implement the chart functionality.

The following points highlight the changes to the supported logic for defining the appearance of the chart (oraChart setting):
• The ability to configure an area chart has been added. This displays as series of data with values represented as lines with filled in areas.

• The ability to configure a "combo" chart has been added. This type of chart allows data to be configured using a combination of bars, lines or filled in areas.

• The configuration of the legend has changed. In previous releases there were two parameters for legend: legend position (left, right or center) and legend orientation (horizontal or vertical). In this release the legend orientation is no longer supported. The legend position supports left, right, bottom, and top. Setting the position to left or right will automatically render it vertically. Setting it to top or bottom will automatically render it horizontally. For upgrade purposes, the legend position of center will result in positioning on the right; the legend orientation will be ignored.

• The depth setting has been changed from a number to simply true / false. For upgrade purposes, if any existing chart references the number 0, it will be treated as "false". A number greater than 0 will be treated as "true".

• The settings margin Left and margin Right are no longer supported. In this release the margin is automatically controlled based on the size of the chart and the legend contents. If an existing chart configures this parameter, it will simply be ignored.

• A new attribute has been provided to support hover text to be displayed anywhere in the graph (not just when above a line). The dataCursor parameter setting of on/off controls this.

• A new attribute has been provided to allow certain types of charts to be oriented horizontally, rather than the default setting of vertical. The orientation:horizontal is supported for bar, line, area and combo chart types.

The following points highlight the changes to the supported logic for defining the source information of the chart (oraChartSeriesN setting):

• In the previous release, stacked cluster and line charts were restricted in that the x-axis information had to be a date. In this release that restriction has been removed. To support this, a new attribute x-axis Format has been added. The user can specify date, in which case the date in the user's display profile format will be displayed. Or the user may specify 'localDate' or 'string', in which case the data is displayed as provided.

• A new attribute has been added for combo charts to define the type of chart to use for each data element being defined.

• New attributes have been added to display a currency code. The chart may specify a currency directly (using a 'currency' parameter) or may reference an XPath value to a field that contains the currency code to use (currencyPath).

• The various color parameters (color, colorPath and pieColors) have been enhanced to support a valid HTML color code (in addition to the support for an RGB value).

Override Zone Description
A zone description override field has been added to the Zone object allowing implementations to override the description of base delivered zones. This is especially useful for zones that are visible on portals as the zone description acts as the zone title on the user interface.

Multi-Query Zones Display the Help of the Selected Zone
In previous releases, a multi-query zone would only display the help text defined on the multi-query zone. If any of the individual zones linked to the multi-query zone included help text, this was ignored.

In this release, the system has been enhanced to display the help of an individual zone for a multi-query zone if the multi-query zone does not have help text defined.
Zone Header Action - Ability to Pass a Constant Value to a BPA

In this release, the Implementer Action and Override Action zone parameters have been enhanced to support passing a constant (or literal) value when invoking a BPA script. The "context=" setting now supports FIELD_NAME='Literal Value' to pass into the BPA.

Changes to Query and Info Zone Labels

In this release, the following miscellaneous changes were made to query and info zones:

- For zones with filter criteria (query zones and some info zones) the "Refresh" bar has been replaced with a "Search" button.
- For multi-query zones, the prompt for the dropdown to choose the query option has been changed from "Query Option" to "Search By".

Changes to Styles for Configurable Columns (Drag and Drop)

The following points highlight changes related to configurable columns, also known as "drag and drop".

- In previous releases, when a zone is configured to support drag and drop, the text of the active column headers was surrounded by a box. In this release, no special style is used for the active column headers. This applies to the results area and to the configuration area, where the active column headers are visible along with the potential column headers.
- In previous releases, the mechanism to remove an active column from the query results was to "drag" it to a "discard area", which was rendered as a bar with three red "X"s. In this release, active columns are shown in the configuration area with an adjacent trash can icon. The mechanism to remove an active column from the query results now is to click the trash can.
- In previous releases, the column configuration area was always shown below the search results. If a zone is configured to have a filter area, you are able to configure whether the filters are shown above or below the search results. When configured to show below the search results, the filter or the column configuration were shown (or neither) but never both at the same time. However, if the filter area was configured to display above the search results, the column configuration remained below. In this release, the column configuration area "follows" the configuration of the filter area. Either one or the other may be displayed (or neither) but not both.
- In previous releases, after performing any column configuration change (add column, remove column, rearrange column) the user clicked a "Refresh" bar visible above the search results and in the column configuration area. In this release, there is no longer a refresh bar above the search results. The user should click the Refresh button in the column configuration area.

Drag and Drop Column Capability Added to Query Zone Type

In previous releases, the two Info Data Explorer zone types F1-DE (Multiple SQLs) and F1-DE-SINGLE (Single SQL) supported the ability to add or remove columns in a result set. This is also referred to as "drag and drop" capability.

In this release, the Query Data Explorer zone type (F1-DE-QUERY) has been enhanced to allow drag and drop of columns. To support this functionality, the following parameters were added to zones of that type:

- Configuration Area Display Options. This parameter is used to indicate if Drag and Drop is applicable and if so, if the "drag and drop area" (that displays the possible columns) should be Open or Closed by default. If drag and drop is applicable, the "explorer" icon will be visible in the zone header area to allow for toggle of the drag and drop area. By default, Drag and Drop will not be applicable. Existing zones of this type will not see the drag and drop area or "explorer" icon.
New Features and Enhancements

- Initial Display Columns. This parameter is required if drag and drop is applicable. It indicates the columns that should be displayed initially when first entering the query.

The following points highlight some differences in behavior for a query zone that is configured for Drag and Drop:
- If multiple SQLs are defined in the query, all SQLs must define the same columns for display.
- The initial columns are display even before a search is performed. This allows for a user to already adjust the desired columns to include in the results prior to performing the query. This is different than queries that do not support drag and drop where the result columns are not displayed until the query is performed.

Ability to Pre-populate a User Filter

In this release, the user filter zone parameters have been enhanced to support configuration for pre-populating a value from context.

Ability to Populate Global Context with a Constant

A map zone can be configured to populate global context. In previous releases this value could only be the value of XPath from a schema read by the zone. In this release the global context may also be populated with a constant / literal value.

For example, imagine the map displays a record and that record could have a related record, such as an Approval Request or an Attachment that uses the Maintenance Object (MO) + PK1-5 as its link to the displayed object. If an edge product wants a dashboard zone to display the related Approval Request, the current record's MO can simply be populated from the zone parameter.

Navigate to a Specific Sub-Query Zone

In this release, navigation option has been enhanced to allow for a specific multi-query zone/sub-zone to be defined.

This allows for navigation (for example from a context menu) to a specific search option. Typically this would be used in conjunction with the enhancement to pre-populate user filters from context (described above).

New Calendar Zone Type

In this release, a new zone type has been introduced to support configuring a zone that shows events in a calendar format. This is similar to the existing Timeline zone type where events can be shown for a given period using a timeline representation.

The zone allows for a user to choose whether data for a month, week, or day is shown and allows the user to move forward or backward in time.

The configuration on the zone controls what data is displayed. Algorithms are used to retrieve the data and control configuration related to what information to display for each event (including 'hover' text to display on mouse over), whether the user can drill into the data (and where the user is taken) and whether the data supports broadcasting to another zone on the portal.

The zone supports up to 10 algorithms. Each algorithm is responsible for retrieving a certain type of data and receives the following information:
- One or more context key values (such as account ID or crew ID or device ID). The available keys depend on the configuration and behavior of the portal where the zone will be linked. The algorithm uses the input context information to retrieve the appropriate data.
- A date/time range based on what the user is requesting to view.
The calendar should return what type of data is being returned and an appropriate color to use. For each event in the date/time range, the algorithm can indicate its start/end date/time, a description, its MO/PK1-5, navigation details, broadcast details, and hover text.

Note that the framework does not supply any base algorithm types. Refer to your own product's release notes to determine if any base algorithm types and possibly pre-configured algorithms are supplied. If so, you may configure algorithms (or confirm the configured base algorithms) per your implementation's needs and then create a zone for this zone type referencing the algorithms. At that point, link the new zone to an appropriate portal.

External System Integration Enhancements

The following topics highlight enhancements related to functionality provided for communication with external systems.

Move to External Message Admin Menu

In the previous release, the portal pages related to IWS functionality were in a special sub-menu in the Admin Menu called Inbound Web Services. In this release, the IWS related pages have been moved to the External Message Admin sub-menu. This is only visible for implementations that configure their Admin Menu to be grouped Functionally rather than Alphabetically (via an installation option).

Rename Annotation Objects

In this release,

- Inbound Web Service Annotation Type has been renamed **Web Service Annotation Type**.
- Inbound Web Service Annotation has been renamed **Web Service Annotation**.

Implementations that use an **Alphabetic** grouping of the Admin Menu (via an installation option) will now find these pages under **W**.

Security Enhancements

The following topics highlight security related enhancements.

Attempting to View a BO Based Record with No Access Rights

For MOs that are governed by a business object and are maintained on a portal with zones, there are essentially three levels of security possible:

- MO level security. All maintenance objects have a security application service with the Add, Change, Delete and Inquire access modes. Users must be granted rights for an MO to be able to do any viewing or updating of a record in that MO.
- Portal level security. All portals have a security application service with the Inquire mode. Users must be granted rights for the application service to be able to use the portal.
- Business Object security. All business objects have a security application service. If the BO doesn't have its own lifecycle, the application service typically matches the MO's application service. However, a BO with a lifecycle will have an application service that includes the actions for its states. Implementations may choose to apply different application services to different business objects within the same maintenance object if there are certain types of records for an MO that one group of people can view and maintain but others can't.

In previous releases, if a user was attempting to view a record and had appropriate application security for the Maintenance Object and the Portal, but not the particular BO, the portal would display, but the main zone that shows the data would be empty. In this release, an enhancement
has been introduced to issue an explicit error when trying to drill into a record via a hyperlink if the user does not have appropriate BO security for the record.

**Browser Security**

In this release, the application is configured to run using the secure HTTP. The digital certificate supplied by the product is only a demo certification. Implementations must configure the appropriate browser certification.

**COBOL No Longer Supported**

In this release, COBOL is no longer supported. All custom algorithm programs, batch programs, and other custom code written in COBOL must be converted to Java prior to upgrading to this release. Refer to your product support team for more information.

**Label Changes**

On the Field page, the Level 88 Cpybk field label has been changed to Value List. In addition, this field is only visible for Oracle Utilities Customer Care and Billing and Oracle Public Sector Revenue Management.

The following lookup value descriptions have been changed

<table>
<thead>
<tr>
<th>Page</th>
<th>Field Label</th>
<th>Field Name</th>
<th>Lookup Value</th>
<th>Old Description</th>
<th>New Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algorithm Type, Batch Control</td>
<td>Program Type</td>
<td>PGM_TYPE_FLG</td>
<td>CBL</td>
<td>COBOL</td>
<td>Java (Converted)</td>
</tr>
<tr>
<td>Service Program</td>
<td>Service Type</td>
<td>MD_SVC_TYPE_FLG</td>
<td>COB</td>
<td>Cobol Based Service</td>
<td>Java (Converted)</td>
</tr>
<tr>
<td>Table</td>
<td>Audit Program</td>
<td>AUDIT_PGM_TYPE_FLG</td>
<td>CBL</td>
<td>COBOL</td>
<td>Java (Converted)</td>
</tr>
<tr>
<td>N/A</td>
<td>Variable Type</td>
<td>VAR_TYPE_FLG</td>
<td>CBCN</td>
<td>Cobol constant</td>
<td>Constant</td>
</tr>
</tbody>
</table>

**Application Viewer Changes**

The following points highlight changes to the application viewer in this release.

- The Group/Ungroup functionality in the MO Viewer was removed.
- The View Service Program icon on the MO Viewer was removed. This functionality was specific to COBOL based MOs and with the removal of COBOL in this release, it is no longer applicable.
- The COBOL Source Viewer functionality was removed.

**XAI Update Details**

XAI will continue to be supported for existing implementations. However it is not recommended for new implementations. In addition, existing implementations are encouraged to move their XAI functionality to newer external message functionality.

The following topics highlight some changes to the product with respect to the XAI functionality.
New Features and Enhancements

Rename XAI Sender

XAI Sender is still used for a small number of non-XAI features in the product for its configuration. To minimize confusion, the object has been renamed Message Sender in this release. In addition, in the Functional Admin menu grouping, it has been moved from the XAI sub-menu to the External Messages sub-menu.

Rename XAI Option

A small number of XAI Options are used for settings for non-XAI features in the product, namely Outbound Message settings and Real Time Email settings. To minimize confusion, the object has been renamed Message Options in this release. In addition, in the Functional Admin menu grouping, it has been moved from the XAI sub-menu to the External Messages sub-menu.

Rename XAI Class

Message Sender (formerly XAI Sender) references a class. To avoid confusion, the field has been renamed Message Class.

Move Application Services from ALL_SERVICES

The base user group ALL_SERVICES normally includes all the base application services and all their access modes so that new implementations can easily review base functionality in testing environments. It is not expected for implementations to use the ALL_SERVICES user group in production. Implementations should be defining appropriate user groups for their users based on appropriate business responsibilities. To avoid confusion for future implementations, the framework product does not include the application services for XAI functionality that is no longer recommended in the ALL_SERVICES user group. This should not impact existing implementation because the user groups defined are not affected. However, in case there are still testing regions still relying on the ALL_SERVICES configuration, the application services for functionality related to XAI are linked as CM-owned.

Note that your specific product may have chosen to configure the XAI-related application services as product owned in ALL_SERVICES if your product is still relying on XAI for base supported functionality.

System Data Update Details

BO Status Option Update

A BO Status Option value was introduced in version 4.2.0.2.0: F1AT with the short description "Auto Transition Required". In this release, the option description was changed to "Allow Manual Monitor" to more correctly reflect the functionality.

Remove Description from General BI Configuration BO

The business object F1-BIGeneralMasterConfig (Generic BI Configuration) was introduced in a previous release. This BO included a description element mapped to the Master Configuration Data (CLOB) field. The description element is extraneous and is not mapped to a language based table. In this release the BO has been updated to remove the mapping. The description is no longer visible on the user interface or retrieved using "invokeBO" for this business object.

Batch Monitor Updates

The following monitor batch controls have been updated to populate the maintenance object parameter.

- F1-BUNBR Bundle Monitor: F1-BUNDLE
- F1-REVPR Object Revision Monitor: F1-OBJ REV
• F1-SYNRQ Sync Request Monitor: F1-SYNC REQ

The following batch controls was incorrectly released and has been removed:
• WX-NOTIF Self-Service Notification Monitor.

Messages

The message category 80000 is provided to support implementer messages (along with message category 90000). Two test messages that had previously been released in message category 80000 have been removed in this release:
• Message number 1: Testing terminate with error... Parm 1 is %1, Parm 2 is %2.
• Message number 2: The adjustment type's currency %1 differs from the installation's currency %2 (adj type: %3)

Inbound Web Service Deployment Portal

The portal was incorrectly configured to show on portal preferences. This setting on the portal has been updated to No.

In addition, this portal configured a zone that was not supported. This zone (F1-IWSUNSINC - Inbound Web Services) has been removed from the portal and has been deleted from the application as it was not in use.

FK Reference

The following FK Reference was created in error and is not being used: F1-IWSVS. It has been removed in this release.

Main Menu Order Adjustment

In a previous release, the sequence numbers of the main menu entries for To Do, My Preferences, Batch and External Message (formerly XAI) were adjusted to be lower numbers (11, 25, 27 and 23 respectively). This change would not have impacted upgraded environments because the sequence number is a customizable field. Only new installations would have seen this order.

The sequences have been adjusted to 60 and higher. Depending on how your product has ordered other main menu entries, this should result in those menu entries being farther down on the list of entries.

Note that if your implementation has customized the order to something else, the order will not be adjusted.

Functionality Deprecation

Configuration Lab/Archiving & Purging Using DB Process

In this release the configuration lab and archiving and purging processes that are built using DB processes are no longer supported. Most changes are related to the products that supported this functionality in the past.

In the framework, the Maintenance Object page is impacted. The following fields are no longer applicable and have been removed:
Program Com ID. This was a program related to the maintenance object only used by ConfigLab.
Compare Method flag on the Table collection.
**Embedded Help Portal**

This portal was provided to help in defining inline or embedded help for UI maps. The tool is not widely used. It has been deprecated in this release.

**Planned Deprecation**

- The table usage flag (TBL_USAGE_FLG) on MD Table (CI_MD_TBL) and the field usage flag (FLD_USAGE_FLG) on MD Table Field (CI_MD_TBL_FLD) will be deprecated in a future release. The fields are not used by the product.

- Environment Reference. This administrative maintenance object was related to ConfigLab and Archiving, which are no longer supported. In a future release, the following will be removed:
  - Migration Plan **F1-EnvironmentRef**. Note that no base migration request references this plan. Implementations should ensure that no custom migration request references this plan.
  - Business Object **F1-EnvironmentRefPhysicalBO**.
  - Maintenance Object **ENV REF**.

- The To Do Type **F1-SYNRQ** (Sync Request Error) is not in use and will be deleted in a future release. Errors for the Sync Request Monitor (that also has the name **F1-SYNRQ**) are reported using the To Do Type **F1-SYNTD** (Sync Request Monitor Errors).

- The service program **EMAILSERVICE** (Email Service) is invalid and will be deleted in a future release. The service program **F1-EMAILSERVICE** is the valid one provided for the real-time email service functionality.
Known Issues

The following are known issues in Oracle Utilities Application Framework version 4.3.0.0 at the time of release:

- The import process for CMA (configuration migration import) is not working correctly and should not be used. [20402734]

- Time zone is a required field on installation. However, an upgrade script to populate the value has not been provided. This will be addressed in the next Service Pack. In the mean time, implementations should review their installation record and if Time Zone is not already populated, configure an appropriate time zone for your implementation. [20823506]

- When an Outbound Message gets created/updated, any validation algorithms on the Outbound Message BO are not executed. This will be addressed in the next Service Pack. [20846956]

- Under certain conditions use of the application's back button can cause data not to populate correctly. [18113582, 20738676, 20579148, 20673696]

- The UI Framework does not fully support right-to-left languages such as Hebrew and Arabic. Issues will be addressed in the next Service Pack. [20025897, 20084229, 20084229, 20501959, 20609061]

- Under certain conditions, the Schema Editor raises an error when creating a Business Service. [20774258]

- There are alignment or sizing issues on certain grids and popups. [20634237, 20425891]

- In Firefox, there is some inconsistency in the display of the filter icon in Explorer zones. [20576737]

- In Firefox, the display of Maintenance Objects in the Application Viewer do not render correctly. [15841292]

- Information displayed in the status bar does not appear in Firefox. [10120730]

Bug Fixes Not Included in This Release

This section lists bug fixes released for previous versions of the product that have not been included in this release. These fixes are planned for a future date for the current release using the bug numbers listed in the tables below:

<table>
<thead>
<tr>
<th>Original version</th>
<th>Original Fix</th>
<th>Description</th>
<th>4.3 Bug Fix</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.0.2.0</td>
<td>20740212</td>
<td>Incorrect name query selected when going back on multi query data explorer</td>
<td>20773647</td>
</tr>
<tr>
<td>4.2.0.1</td>
<td>20681165</td>
<td>Memory leak in some autotransition batch jobs</td>
<td>20876731</td>
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<tr>
<td>4.2.0.2.0</td>
<td>20858636</td>
<td>Level of service shows errors in timed batch jobs</td>
<td>20858655</td>
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<td>4.2.0.3.0</td>
<td>20847082</td>
<td>Request search (f1-subreq) does not take the lifecycle BO into consideration</td>
<td>20854556</td>
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<tr>
<td>4.2.0.2.0</td>
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<td>ILM edit information sections are at the bottom when the ILM BO is extended</td>
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<tr>
<td>4.2.0.3.0</td>
<td>20797010</td>
<td>Improve error handling with datetime conversion in XAI</td>
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<td>4.2.0.1.0</td>
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<td>Home link does not navigate to the correct home page</td>
<td>20837501</td>
</tr>
<tr>
<td>Original version</td>
<td>Original Fix</td>
<td>Description</td>
<td>4.3 Bug Fix</td>
</tr>
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<tr>
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<tr>
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<td>Increase field email address from 70 characters to 254 characters</td>
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<td>Search window will not launch when IE9 browser is at 150% (intermittent)</td>
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<td>Enhancements to BI Extract batch programs</td>
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<td>18111283</td>
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<tr>
<td>4.2.0.2.0</td>
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<tr>
<td>4.2.0.1.0</td>
<td>19232235</td>
<td>Scroll bars always hide one menu item even when there is enough space</td>
<td>20925183</td>
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</tbody>
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