### **Oracle Utilities Digital Asset Management**

Release Notes Release 2.0.0.1.3 F88987-01

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Oracle Utilities Digital Asset Management Release 2.0.0.1.3 Release Notes

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# Preface

Welcome to the Oracle Utilities Digital Asset Management Release Notes. This release notes provides an overview of the new functionality, enhancements, known issues and other changes in Oracle Utilities Digital Asset Management V2.0.0.1.3.

The preface includes:

- Audience
- Related Documents
- Updates to Documentation
- Conventions
- Acronyms
- Additional Resources

# Audience

Release Notes is intended for anyone installing or using Oracle Utilities Digital Asset Management.

# **Related Documents**

For more information, refer to these Oracle documents:

#### Installation Guides and Release Notes

- Oracle Utilities Digital Asset Management Release Notes
- Oracle Utilities Digital Asset Management Quick Install Guide
- Oracle Utilities Digital Asset Management Installation Guide
- Oracle Utilities Digital Asset Management Database Administrator's Guide
- Oracle Utilities Digital Asset Management Licensing Information User Manual

#### User Guide

- Security Guide
- Server Administration Guide

# **Updates to Documentation**

The complete Oracle Utilities Digital Asset Management documentation set is available from Oracle Help Center at https://docs.oracle.com/en/industries/energy-water/index.html.

Visit My Oracle Support for additional and updated information about the product.

# Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# Acronyms

- ·	
Acronym	Definition
ССВ	Oracle Utilities Customer Care and Billing
C2M	Oracle Utilities Customer To Meter
SOM	Oracle Utilities Service Order Management
SGG	Oracle Utilities Smart Grid Gateway
ODM	Oracle Utilities Operational Device Management
MDM	Oracle Utilities Meter Data Management
OUAF	Oracle Utilities Application Framework
DAM	Oracle Utilities Digital Asset Management

The following acronyms and terms are used in this document:

# **Additional Resources**

Additional and updated information about the product is available on My Oracle Support. For more information and support, visit the Oracle Support website.

# **Chapter 1**

# Oracle Utilities Digital Asset Management Release Notes

Welcome to the Oracle Utilities Digital Asset Management Release Notes. This document provides general information about Oracle Utilities Digital Asset Management V2.0.0.1.3 including new functionality, known issues, and other important information.

This guide includes the following:

- About This Release
- Supported Platforms
- Supported Integrations
- Demo Data Information
- User Configuration
- Enhancements in Digital Asset Management
- Known Issues in This Release
- Oracle Utilities Application Framework V4.5.0.1.3 Release Notes

For information about supported platforms and installation steps, refer to the *Quick Install Guide* and *Installation Guide* included in this release.

### About This Release

This section contains general information about this release of Oracle Utilities Digital Asset Management 2.0.0.1.3. The release includes the following components:

- Oracle Utilities Digital Asset Management 2.0.0.1.3
- Oracle Utilities Application Framework 4.5.0.1.3

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 Digital Asset Management 2.0.0.1.3 to ensure you have the most current version of this product.

#### Supported Upgrades

This version of Oracle Utilities Digital Asset Management supports the following upgrade paths:

- From Oracle Utilities Digital Asset Management v2.0.0.0 to 2.0.0.1.3
- From Oracle Utilities Digital Asset Management v2.0.0.1.1 to 2.0.0.1.3
- From Oracle Utilities Digital Asset Management v2.0.0.1.2 to 2.0.0.1.3

### Supported Platforms

See the **Supported Platforms** section in the Oracle Utilities Digital Asset Management *Quick Install Guide* (included in this release) for a list of supported platforms.

### Supported Integrations

The following integrations are supported in this version of Oracle Utilities Digital Asset Management.

- Oracle Utilities Digital Asset Management 2.0.0.1.3 Integration to Oracle
  Utilities Distributed Energy Resources Management System
- Oracle Utilities Analytics Insights Integration to Oracle Utilities Digital Asset Management 2.0.0.1.3 and Oracle Utilities Grid Edge Distributed Energy Resources Management System
- Oracle Utilities Customer Cloud Service Integration to Oracle Utilities Digital
  Asset Management

**Note:** Version numbers listed are supported as of the v2.0.0.1.3. release (December 2023). Refer to the Certification Matrix for Oracle Utilities Products (Document ID 1454143.1) on My Oracle Support to determine if support for newer versions of the listed products have been added.

## **Demo Data Information**

The application delivers a demo database based on the application versions provided with the release, including Oracle Utilities Application Framework. Demo data provides sample configuration and data for key application features.

Demo data is included in the package and includes its own installation instructions. Please refer to the *Oracle Utilities Digital Asset Management Database Administrator's Guide* for more information or contact Oracle Support.

### **User Configuration**

Oracle Utilities Digital Asset Management shares its application environment with other Oracle Utilities products, including Oracle Utilities Customer to Meter and Oracle Utilities Work and Asset Management. The default installation of any of these products provides access to all menu items and functionality provided with these products.

To configure the system such that only menu items and functionality used by *Oracle Utilities Digital Asset Management* is available, application users should be assigned to the following set of user groups:

- Digital Asset Services (DACS\_SERVICES)
- DACS WAM Services\* (DACS\_WAM\_SERVICES)

\* This user group provides access to Work and Asset Management functionality included with Oracle Utilities Digital Asset Management.

Refer to the **Defining Users** section in the *Administrative User Guide* for more information about setting up users.

### **Enhancements in Digital Asset Management**

This section describes new features and functionality included in this release of *Oracle Utilities Digital Asset Management* including the following:

- Product Usability Enhancements
- Program Enhancements
- Field Work Enhancements
- Integrations

#### **Product Usability Enhancements**

This section describes new product usability enhancements introduced in this release, including:

- Customer Portal Controllable Device Program Service Calls
- Customer Portal Customer Insights Zone
- Device Setup Panel Updated Process Flow for Appointments

- Enrollment Process Flow Capturing and Passing Additional Customer Information
- Unenrollment Process Flow Device Removal and Return Options

#### **Customer Portal - Controllable Device Program Service Calls**

The **Customer Portal** now enables you to initiate a service call process to capture updated customer information, record details pertaining to a controllable device, categorize the service calls as an emergency or non-emergency, and link the new service call with an existing service call. Additionally, you can escalate the service call to a particular role or create a new work order and assign it to the appropriate crew member. You can also mark the service call as resolved based on the interaction with the customer.

This expands the capability of the **Customer Portal** to capture service calls relating to customer-owned devices.

#### Steps to Enable

You don't need to do anything to enable this feature.

#### **Customer Portal - Customer Insights Zone**

The **Customer Insights** zone on the **Customer Portal** enables you to view program enrollments or unenrollments in the "In Progress" state. You can also initiate the cancellation of these enrollments or unenrollments from the zone's actionable insights upon confirmation of the customer.

This provides visibility of in-progress program enrollments and unenrollments.

#### Steps to Enable

You don't need to do anything to enable this feature.

#### **Device Setup Panel - Updated Process Flow for Appointments**

Previously, in the Device Setup panel of the **Process Flow** portal, the Service Order Management (SOM) field activity or work activity was created before the **Request Slot** option was selected to book an appointment when enrolling or unenrolling customers. In this release, the **Device Setup** panel initially shows the appointment slots and displays the fields for creating the SOM field activity or work activity after booking an appointment. The modified panel sequence enhances the enrollment and unenrollment process flow by presenting the available crew shifts as appointment slots and the selected appointment slot persists and updates on the work activity. If enrolling in more than one program, like a thermostat program and energy efficiency program, separate work activities need to be created and the application presents appointment slots for each activity.

This minimizes the creation and cleanup of unnecessary activities.

#### Steps to Enable

You don't need to do anything to enable this feature.

# Enrollment Process Flow - Capturing and Passing Additional Customer Information

Enrollment involves identifying a specific customer that is eligible for a particular program, and establishing a relationship between the customer, the program, and if appropriate, a device location where one more controllable devices are (or have been) installed. In this release, the enrollment process workflow captures information such as interaction notes, notification preferences, number of thermostats on the premise, and setback value for thermostats from custom fields and passes these to the work activity. The captured information persists to the enrollment service task created for each enrollment process.

This provides flexibility to capture additional information during interaction with the customer that can be sent to the field work system.

#### Steps to Enable

You don't need to do anything to enable this feature.

#### **Unenrollment Process Flow - Device Removal and Return Options**

Unenrollment involves removing a previously enrolled customer from a program, and deactivating program subscriptions and related controllable devices. The unenrollment process flow now enables you to determine whether the field work activity removes the device, the customer ships the device, or the customer retains the out-of-warranty device. A new **Program** panel populates the details of the enrolled program along with the controllable device and its age, providing additional information for decision making. Additionally, the **Device Setup** panel within the process flow provides device removal method options that indicate whether a work activity is required.

This provides the flexibility to select the best device removal option during an unenrollment.

#### Steps to Enable

You don't need to do anything to enable this feature.

#### **Program Enhancements**

This section describes new program enhancements introduced in this release, including:

- Non-device Related Programs Support
- Program Set Qualification Question Responses as Required or Optional
- Service Tasks Identify Enrollment Channel/Source

#### Non-device Related Programs Support

You can create and manage non-device related programs like Critical Peak Pricing Programs or Peak Time Rebate, and enroll customers to these programs. These programs typically handle customer behavior-driven demand management. In addition, you can configure your enrollment process to allow or disallow enrollments to these programs. Customers enrolled in non-device related programs receive event notifications that define their behavioral patterns when they participate or opt-out.

This provides the capability to enroll customers to behavior-driven demand programs.

#### Steps to Enable

You don't need to do anything to enable this feature.

#### Program - Set Qualification Question Responses as Required or Optional

Qualifications are questions related to the customers and their premises that are used to determine eligibility to enroll in the program. However, there are instances where the customers do not have the responses to these question at the time of data capturing, which results to them not completing the enrollment process. The Program now provides a "Required" or "Optional" setting to either make the responses to the questions mandatory or not required. Optional responses to qualification questions lessen the non-completion rate of enrollments.

This flexibility to set responses to enrollment qualification questions as mandatory or optional provides a better customer experience.

#### Steps to Enable

You don't need to do anything to enable this feature.

#### Service Tasks - Identify Enrollment Channel/Source

The **Enrollment Channel/Source** field that appears on a service task displays whether the customer was enrolled in a program via the self-service portal, contact center agent, or an external aggregator (Bring Your Own). This allows you to track the channel or source for each customer enrollment and generate a report to analyze the volume and efficiency of each source.

This allows you to categorize and report customer enrollments based on channel or source.

#### Steps to Enable

You don't need to do anything to enable this feature.

#### **Field Work Enhancements**

This section describes new field work enhancements introduced in this release, including:

- Bundled Enrollments Single Work Order
- Controllable Devices Work Completion Event

#### Bundled Enrollments - Single Work Order

The Program Enrollment process was enhanced to allow for the creation of a single work order for bundled enrollments. For example, enrolling in a Smart Thermostat program and its related In-Home Energy Assessment program generates one work order instead of two separate work orders. Previously, separate enrollment service work orders had to be created for enrollments to related programs.

This reduces the creation of separate work orders for multiple enrollments by a single customer.

#### Steps to Enable

You don't need to do anything to enable this feature.

#### **Controllable Devices - Work Completion Event**

Completion events are used to capture closeout information against activities received from an external application. Controllable devices are installed devices at a location that enable participation in demand response programs and program events. The application now automatically records controllable devices against metered service points during work completion events.

This provides you with information to determine interoperability and compatibility, define load or capacity characteristics, determine device performance metrics, and more.

#### Steps to Enable

You don't need to do anything to enable this feature.

#### Integrations

This section describes new integration-related enhancements introduced in this release, including:

- Device Manufacture and Model to Oracle Field Service
- Customer Cloud Service to Digital Asset Cloud Service Data Synchronization
- Customer-owned Controlled Devices Information to Oracle Utilities Digital
  Asset Management
- Additional Customer Information in Work Activity to Oracle Field Service
- User-defined Fields on Work Activity Outbound Message to Oracle Field Service

#### **Device Manufacture and Model to Oracle Field Service**

The Admin Sync flow now sends the manufacturer and model information held in Oracle Utilities Digital Asset Management to Oracle Field Service. The information is recorded within Oracle Field Service, which becomes accessible to field crews to use for capturing the details of a customer-owned controlled device like an HVAC unit.

This enables you to send the configured manufacturer and model combination to Oracle Field Service and capture details of customer-owned controlled devices.

#### Steps to Enable

To enable this feature, refer to the Oracle Utilities Digital Asset Cloud Service-Oracle Field Service Configuration Guide for more information.

# Customer Cloud Service to Digital Asset Cloud Service - Data Synchronization

Oracle Utilities Customer Cloud Service initiates master data synchronization for the Person, Service Agreement, and Service Point objects to Oracle Utilities Digital Asset Management. The synchronization process handles the initial and incremental updates, and creates a tab-delimited flat file with the required attributes to be transferred from Oracle Utilities Customer Cloud Service to Oracle Utilities Digital Asset Management via Oracle Integration Cloud Service.

Oracle Utilities Digital Asset Management processes the records from the Person file to create the equivalent Contact records, the Service Point file to create the Metered Service Point records, and the Service Agreement file to create the Metered Service records. Oracle Utilities Customer Cloud Service's initial synchronization handles the first-time load of customer data and the incremental synchronization handles updates to the customer data. Oracle Utilities Digital Asset Management returns an acknowledgment for incremental updates only. Up-to-date and synchronized customer information in Oracle Utilities Digital Asset Management correctly determines the customer's program eligibility.

This leverages the Oracle Integration Cloud-based file integration flows to synchronize customer information, which forms a prerequisite for enrolling customers on programs they are eligible.

#### Steps to Enable

To enable this feature, refer to the Oracle Utilities Customer Cloud Service Integration to Oracle Utilities Digital Asset Cloud Service Configuration Guide for more information.

# Customer-owned Controlled Devices Information to Oracle Utilities Digital Asset Management

The pre-built integration flow enables a field worker to send controlled device details as part of the work completion from Oracle Field Service to Oracle Utilities Digital Asset Management. For example, the pre-built integration flow can send the manufacturer, model, and device serial number of the customer-owned device like an HVAC unit while you are installing a Smart thermostat. Oracle Utilities Digital Asset Management then processes the work activity completion details and records the controlled device to the asset location of the controllable device.

This allows you to efficiently manage event participation by providing the capability to receive and process customer-owned controlled device details from Oracle Field Service.

#### Steps to Enable

To enable this feature, refer to the Oracle Utilities Digital Asset Cloud Service-Oracle Field Service Configuration Guide for more information.

# Additional Customer Information in Work Activity to Oracle Field Service

You can capture updated customer name, contact number, email address, and miscellaneous interaction notes from a work activity created by the enrollment or unenrollment of customer to/from a program. You can then pass the captured customer information to Oracle Field Service within the work activity, which becomes visible to the handheld device of the field crew when performing the required work.

This enables field crews to use additional customer information to complete their work activity related to a controllable asset.

#### Steps to Enable

To enable this feature, refer to the Oracle Utilities Digital Asset Cloud Service-Oracle Field Service Configuration Guide for more information.

# User-defined Fields on Work Activity Outbound Message to Oracle Field Service

The work activity outbound message contains activity, asset, and location information, which the field crew receives and uses to perform the work. Oracle Utilities Digital Asset Management captures the following user-defined attributes for activity, asset, and location and sends them to Oracle Integration Cloud Service:

- activityUDF1 activityUDF10
- assetUDF1 assetUDF10
- locationUDF1 locationUDF10

Oracle Integration Cloud Service processes the information and passes it to Oracle Field Service. Oracle Field Service translates the information to custom properties that appears on the field crew's handheld device.

This enables field crews to receive additional information and complete their work.

#### Steps to Enable

To enable this feature, refer to the Oracle Utilities Digital Asset Cloud Service-Oracle Field Service Configuration Guide for more information.

# **Known Issues in This Release**

There are no known issues in this release.

# Oracle Utilities Application Framework V4.5.0.1.3 Release Notes

This section describes enhancements, system data details and deprecation notices in Oracle Utilities Application Framework v4.5.0.1.3 including:

- Product Usability
- To Do Management and Processing Enhancements
- Batch Processing Enhancements
- Implementation Tool Enhancements
- Integration Enhancements
- Content Migration Assistant (CMA)
- Oracle Utilities Application Framework Deprecation Notices

Note: The Steps To Enable, Tips and Considerations, Key Resources, and Role Information sections provide guidelines for enabling each feature, where applicable.

#### **Product Usability**

This section describes the new and enhanced product usability features in this release, including:

- Ability to Override Labels in Business Object Configuration
- Terminology Change: "Sidebar" Replacing "Dashboard"

#### Ability to Override Labels in Business Object Configuration

The following language related to a business object status may now be overridden by your implementation:

- Status description. This is the text visible when displaying the current status of a record that is governed by a business object.
- Next Status Action Label for the business object status' next status. This is the text visible on an action button that you may use to transition a record to the next status.

For example, you could change the status "Canceled" for a given business object to use the term "Discarded". You could do this by navigating to the lifecycle definition for that business object and providing an override description for the "Canceled" state. In addition, you can find the states that transition to Canceled and override the Action Label from "Cancel" to "Discard".

The description of any product-delivered business object Status Reason can now also be overridden by your implementation.

**Note**: There are places where a status or a status reason description is captured as an audit of a point in time, such as in a log record. If you change the description of a status on a business object or the description of a status reason, the change will not cascade to any place that has captured the description previously.

This does not impact any existing extensions. The user interface may change if you choose to override descriptions.

#### Steps To Enable

No steps are required to enable this feature.

#### **Tips and Considerations**

The product delivers two new views:

- F1\_BUS\_OBJ\_STATUS\_VW: This view is built from the data in F1\_BUS\_OBJ\_STATUS\_L, but it sets the value of the DESCR field to the new override description if populated (otherwise to the description).
- F1\_BUS\_OBJ\_STATUS\_RSN\_VW: This view is built from the data in F1\_BUS\_OBJ\_STATUS\_RSN\_L, but it sets the value of the DESCR field to the new override description if populated (otherwise to the description).

If you have any custom zones that retrieve the DESCR field from F1\_BUS\_OBJ\_STATUS\_L or from F1\_BUS\_OBJ\_STATUS\_RSN\_L and you plan to override any business object status description or a status reason description, you should update your custom zone to use the corresponding view instead.

#### Terminology Change: "Sidebar" Replacing "Dashboard"

The vertical area that stays anchored in the application as a user moves through the system is now referred to as a "Sidebar" instead of a "Dashboard." This change is reflected in documentation, metadata descriptions, and configuration on the User page related to the area (including the Sidebar Width, the Sidebar Location and the Sidebar State). This does not impact any extensions.

This allows the "Sidebar" to be distinguished from other "Dashboards" used to describe portals that display high-level views of a specific subject area. For example, the **Batch Day Dashboard** and the **To Do Dashboard**.

#### **Steps To Enable**

No steps are required to enable this feature.

#### **To Do Management and Processing Enhancements**

This section describes the new and enhanced To Do features in this release, including:

- Duration Information Added to To Do Portal and Information String
- Related To Do Support Improvements

#### Duration Information Added to To Do Portal and Information String

The system now includes the following calculated duration information on the **To Do Entry** page:

- For a non-complete To Do, the Total Duration from its creation until now.
- For a completed To Do Entry, the Total Duration from its creation until its completion.

• For a To Do Entry that had ever been in the In Progress state, the Time In Progress. If it is currently in the In Progress state, the end duration time is the current date/time.

In addition, the base delivered Information string for a To Do Entry has been updated to include the age for a non-complete To Do and the duration for a completed To Do.

If your implementation uses a To Do information algorithm to override the base delivered information, you will not see any change to your To Do information. This change does not impact any extensions.

When you see the calculated duration information, it helps you understand at a glance how long a To Do entry took to work on and how long before it was completed.

#### Steps To Enable

No steps are required to enable this feature.

#### Related To Do Support Improvements

The zone that displays related To Do entries on the **To Do Entry** maintenance portal has been enhanced to support actions on the related To Do entries. In addition, the current To Do being maintained is included in the results so that you can perform actions on all To Do entries.

The **Related To Do Entries** zone supports all the actions available on the **To Do Management** portal. You can do mass assignment, mass updates to priority, mass addition of a log entry, and mass completion. In addition, you have access to the **Work** button to push all the related To Do entries into your Worklist. The actions are only available if a user is allowed to work all the related To Do entries.

On the **To Do Management** zone and the **To Do Details** zone on the **To Do Dashboard** portal, the link for the Related To Dos message now brings you to the **To Do Entry** maintenance portal. Previously, you were brought to the **To Do Search** page where you could do actions only on the To Do entries related to the one in the results.

This does not impact any extensions.

The ability to action one or more related To Dos on the **To Do Entry** maintenance portal provides improved support for managing multiple records.

#### **Steps To Enable**

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No steps are required to enable this feature.

#### **Batch Processing Enhancements**

This section describes the new and enhanced batch processing features in this release, including:

Batch Job Submission Portal

#### **Batch Job Submission Portal**

The **Batch Job Submission** page has been converted to a portal, leveraging a more flexible user interface metaphor. The portal organizes information in a way that makes it easier to review and enter key details, such as batch job parameters.

In addition, the following user interactions were changed in the portal:

- The **Add** dialog now requires the batch control to be entered via a popup map.
- The **Duplicate and Queue** action is renamed to **Duplicate**.
- A new action of **Rerun** has been introduced. This action has the same behavior as **Duplicate** with the exception that it populates the batch rerun number with the batch number in context. This replaces the current dialog whereby a user must manually enter the batch number to be rerun in the batch rerun number field.
- The action buttons now only appear if the user has "execute" access for the batch control in context and has security access to the "queue" action for the batch job submission application service.
- New searches have been introduced for both the batch control entry, on the add popup, and the batch user on the add, duplicate, and rerun input pages. For batch controls, the results are restricted to batch controls to which the user has access. For users, results are restricted to users who have access to the batch control in context.
- The batch number is now displayed as a link to the batch run tree. This replaces the context menu.
- Several fields have been rearranged to increase the amount of space available for the batch parameters. This includes:
  - Moving the submission method to the **Record Information** section.
  - Moving the override and debugging parameters to a collapsed Additional **Run Details** section under **Record Information**. Note that this applies to input windows as well.
  - Suppressing the submission user field if the batch user and submission user are the same.
  - Removing the detailed description column from the batch parameters grid and replacing it with a widget that can be clicked to show the detailed description if needed.

This does not impact any extensions.

#### Steps To Enable

No steps are required to enable this feature.

#### **Tips and Considerations**

A new business object (BO) for Batch Job Submission and a new Determine BO algorithm linked to the Maintenance Object were introduced. The base BO includes all the user interface behavior designed for the new portal. If your implementation has introduced your own CM business object and CM Determine BO algorithm, you should review your business object's configuration and merge it into the base business object.

Upgrade scripts ensure that users with Read access to the existing application service will have access to the new application service associated with the new portal. The table below lists the existing and new application services.

Object	New Application Service	Access Added to any User Groups with this Application Service / Read Access
Batch Job Submission Portal	F1BCHJOB	CILZRBPP

Note that any existing bookmarks for this page will take you to the previous version of the page. You need to take the following actions to move the bookmark to the new page:

- 1. Click the bookmark. Take note of the Batch Job.
- 2. Navigate to the **Batch Job Submission** portal page via the menu.
- 3. Search for and select the Batch Job you noted from your bookmark. This takes you to the new page.
- 4. Delete the existing bookmark from the **Bookmark** dashboard zone.
- 5. Click the **Bookmark** page action button to add a bookmark for this record for the new page.

### **Implementation Tool Enhancements**

This section describes the new and enhanced implementation tools in this release, including:

- Additional Terms Added to SQL Allowlist
- Business Object Portal Improvements
- Extended Tree Node Broadcasting Capabilities
- Extensions Dashboard Improvements
- Maintenance of Lookup Values Improvements

#### Additional Terms Added to SQL Allowlist

The following terms were added to the SQL Allowlist:

- CHR
- COALESCE
- LAG
- NEXT\_DAY
- REGEXP\_INSTR
- REGEXP\_REPLACE
- REGEXP\_SUBSTR
- RPAD
- RTRIM
- XMLQUERY

Note that the terms were also added to the allowlist in previous releases via patches. This does not impact any extensions.

Additional terms included in SQL allowlist provides implementations with more capabilities when writing SQL statements in data explorers.

#### **Steps To Enable**

No steps are required to enable this feature.

#### **Business Object Portal Improvements**

Business object option types and algorithms system events are now documented in designated extendable lookups, **Option Configuration** for option types and **Algorithm Entity Type** for system events. It is noted whether they support single or multiple values. This configuration is for documentation purposes only. Previously, there was no indication as to whether a business object's option type or algorithm system event implemented a single value or supported multiple values.

Using this information, the **Business Object** portal uses an icon to highlight whether a single value option type or algorithm system event record has been overridden by a higher sequence record. The situation may occur when the business object's option or system event configuration is extended by other products or customers. In the same way, an icon is used to highlight that a business object algorithm has been inactivated. The use of these icons makes it easier to focus on configuration records that are in effect and active.

The detailed description of the option types are presented in a more user friendly and searchable way. Also, as of this release, you can maintain reasons for a specific status directly on the **Lifecycle** tab where you review and maintain all other status-related configurations.

This does not impact any extensions.

#### Steps To Enable

No steps are required to enable this feature.

#### **Tips and Considerations**

If you have introduced custom business object-related option types, it is recommended that you also define them in the Option Configuration extendable lookup to indicate whether the option type assumes a single value or multiple values. By default, the **Business Object** portal displays an option type that is not defined in the extendable as if it supports a single value.

In the same way, if you have introduced custom business object related system events, it is recommended that you also define them in the Algorithm Entity Type extendable lookup to indicate whether the system event assumes a single algorithm or multiple algorithms. By default, the **Business Object** portal displays a system event that is not defined in the extendable as if it supports multiple algorithms.

#### Extended Tree Node Broadcasting Capabilities

The Populate Node and Override Information tree node algorithms can now optionally set the broadcast fields to use. When this information is not provided, the default primary key field names are used. Previously, when a user clicked on the broadcast icon on a tree node, the broadcasted field names were hardcoded to the node entity's primary key field names. While this was appropriate for most entities, there were use cases where the broadcasted field names should have differed from key names.

In addition, these tree node algorithms can now also determine that for a specific node the broadcast icon is not applicable and therefore should not be displayed. The tree node definition must explicitly allow broadcasting for the icon to appear and the algorithm can only set it to not appear as needed for a specific node.

This does not impact any extensions.

This allows for better support of complex tree node broadcasting requirements and provides more flexible interaction with trees.

#### **Steps To Enable**

No steps are required to enable this feature.

#### Extensions Dashboard Improvements

The **Extensions Dashboard** portal was enhanced to show all revisions made to an extension entity in descending order in a new **Revision Control** zone. A **Configuration Migration** zone was also added to also list all Content Migration Assistant migration objects that applied changes to an extension entity. These zones appear only when an extension entity is selected.

A new **Review** tab was added to the **Extensions Dashboard** portal to highlight rare duplicate configuration issues that may arise after an upgrade. Utilities can use this information to adjust their configuration.

This does not impact any extensions.

The new user experience allows utilities and partners to improve the way they track and manage their extensions, which helps to reduce implementation costs.

#### **Steps To Enable**

No steps are required to enable this feature.

#### Maintenance of Lookup Values Improvements

Lookup values can be easily filtered by various criteria and a smaller set of records can be selected for update. This helps handle lookup fields, like algorithm entity, that have too many values to manage as a single list. This does not impact any extensions.

This improved user experience helps to reduce implementation costs.

#### **Steps To Enable**

No steps are required to enable this feature.

#### Integration Enhancements

This section describes the new and enhanced integration tools in this release, including:

Object Storage Region Configuration Improvements

#### **Object Storage Region Configuration Improvements**

The definition of valid cloud object storage regions are now configured using an extendable lookup rather than a lookup. Defining the regions in an extendable lookup

allows us to support defining both the region key and the region identifier. Previously, using a lookup to define the region supported only defining the region key. Product code was required to map the region identifier, requiring code change any time a new region was defined.

The product provides base delivered values for all the regions that are provisioned for cloud services. You can define a region for cloud object storage that is not provided by the base produce using the region value in the extendable lookup.

For backward compatibility for upgrading implementations, all regions previously provided in the lookup that are not in the list of those that the product is supplying are provided in the extendable lookup with a "CM" (customer modification) owner.

This does not impact any extensions.

As Oracle Cloud expands the regions it offers, this change allows the services to react to these new regions quickly without changes to the product code.

#### **Steps To Enable**

No steps are required to enable this feature.

### **Content Migration Assistant (CMA)**

This section describes the new and enhanced CMA features in this release, including:

User Import with Content Migration Assistant

#### User Import with Content Migration Assistant

The user record includes a user hash for security reasons. This hash value is calculated using a cryptography key in a given environment. When using Content Migration Assistant to import users from another environment, the process now includes a step to recalculate the user hash value using the target environment's cryptography key.

This update means implementations can import users from one environment to another without getting an error related to the user hash.

#### **Steps To Enable**

No steps are required to enable this feature.

#### **Oracle Utilities Application Framework Deprecation Notices**

This section provides information on functionality that has been removed, is no longer supported by Oracle Utilities Application Framework v4.5.0.1.3, or is planned for removal.

- Deprecated Items
- Items Planned for Future Deprecation

#### **Deprecated Items**

There are no deprecated functionality or system data for Oracle Utilities Application Framework v4.5.0.1.3.

#### Items Planned for Future Deprecation

This is a list of functionality / system data that Oracle plans to deprecate in a future release.

#### Support for Previous User Experience

In the current release, the product provides an option to Switch UI View. This changes the current user experience for the user for that session. Assuming the user is in the latest user experience (referred to as Redwood), this action switches the user experience to the previous look-and-feel.

In the future, the product plans to remove support for the ability to switch that design that preceded Redwood.

#### Workflow and Notification Metadata and Database Tables

Workflow and notification functionality was an early way to support exchanging messages with an external system (notification) and providing a configurable process for acting on incoming messages (workflow). In more recent years, the functionality for managing external messages is supported using Outbound Message and Inbound Web Service functionality. In addition, there are several features to support processing incoming messages. Service scripts can handle simple use cases. For more complicated processes, the service task or other business object driven objects are available.

The metadata and database tables related to this feature will be removed in a future release. Note that only a portion of the functionality for this feature is managed by Oracle Utilities Application Framework. Most of the functionality is supported in the Oracle Utilities Customer Care and Billing product.

#### Mobile Application Framework Metadata

Removal of support for the Mobile Application Framework has already been announced in a previous release. However, there is metadata still included in the application related to this functionality.

The metadata will be removed in a future release.

#### Key Ring Validation Scripts, Algorithm Types, and Algorithms

The product is removing all scripts, algorithm types, and algorithms that performed validation rules on the K1-SignatureKeyRing business object. The algorithms have been removed from the BO configuration. There are requirements to expand the use of a signature key ring beyond the current implementation for object file storage and the existing validations are not applicable to other planned use cases.

The following items will be removed in a future release.

- Algorithm
  - K1-KRDCKFS
  - K1-KRINCKFS
- Algorithm Type
  - KRDCKFS
  - K1-KRINCKFS
- Message
  - 11009 / 1402

- Plugin Script
  - K1-KRDCKFS
  - K1-KRINCKFS
- Service Script
  - K1-ChkCfgExL

#### **UI Metadata Related to Converted Pages**

The UI metadata related to fixed pages that have been converted to portals will be removed in a future release. The navigation keys listed are related to each maintenance page. The related UI program component data will also be removed. Note that the metadata related to the search pages will not be removed at this time in case they are used on other fixed pages.

- To Do Entry Maintenance
  - toDoEntryCharGrid
  - toDoEntryDrillKeyValuesListGrd
  - toDoEntrySortKeyValuesListGrid
  - todoentrykeyvalue
  - todoentrymain
  - toDoEntryMaint
  - toDoEntryPopupAdd
  - toDoEntryPopupForward
  - toDoEntryPopupSendBack
  - Any help navigation keys
- Table Maintenance
  - metaDataTableFieldsGrid
  - metaDataTableMainPage
  - metaDataTableCFldsGrid
  - metaDataTableConstPage
  - metaDataTableMaint
  - metaDataTableRefByConstPage
  - metaDataTableFieldPage
  - Any help navigation keys
- Work Calendar Maintenance
  - workCalendarMaint
  - workCalendarMainPage
  - workCalendarHolidayGrid
  - Any help navigation keys
- Message Maintenance
  - msgMaintDetailsPage

- msgMaintGrid
- msgMaintPage
- msgMaintTabMenu
- Any help navigation keys
- Time Zone Maintenance
  - timeZoneMainPage
  - timeZoneTabMenu
  - Any help navigation keys
- Application Security Portal
  - f1appsecTabMenu
- Display Icon Portal
  - displayIconRefMaint

#### Miscellaneous System Data

The following metadata is no longer in use and will be removed in a future release:

Object	Data	Description/Comments
Lookup Value	CHAR_ENTITY_FLG / F1SE	Characteristic Entity / Sync Request Inbound Exception
Script	F1-TDMgActSS	To Do Management - Process Actions (Deprecated) / Replaced by F1TDMgActSS
Script	F1AddDebugLg	Add Log for Monitoring Probe (Deprecated) / Replaced by a BS - F1- MONPRBLOG
Script	F1MgOlmpMnt	Not in use by base functionality
Script	F1MgoSqlPks	Not in use by base functionality
Script	F1MgOlmpPst	Not in use by base functionality
UI Map	F1- MigrObjectImportMaintenanc e	Not in use by base functionality
Zone	F1-BOMOSRCH	Not in use by base functionality
Zone	F1-CATCHSCH	Not in use by base functionality
Zone	F1-MONAVKEY	Not in use by base functionality
zone	F1-REVCONQRY	Not in use by base functionality

#### XSLT Managed Content Type

Entries in the Managed Content table related to XSL should be using the XSLTC managed content type and not the XSLT managed content type. In a future release, the XSLT managed content type will no longer be supported.

#### **REST IWS - Original REST Servlet**

The original URL supplied for invoking IWS based REST services included the IWS Service name in its makeup. Support for this will continue for backward compatibility purposes, but it will be deprecated in a future release. You should adjust your existing integrations to use the currently supported URL.

#### Append Setting from Pagination

There are several known issues with the functionality of the "append" option in pagination. It is recommended that you do not use this pagination setting.

#### Support for Master/Subordinate Servers for Web Service Catalog

The Service Catalog Configuration (master configuration) enables you to define subordinate servers. Defining subordinate servers is no longer applicable for the Oracle Integration Cloud.

#### **Batch Run Statistics Portal Functionality**

The **Batch Run Statistics** portal provides additional information about batch runs, but some functionality on the portal is related to capturing additional information from an external tool. This information is stored in a Fact record. Support for capturing additional information from an external tool will be discontinued in a future release.

#### F1-MAINPROC Business Object Read When Pre-processing Exists

In the original implementation of configuration tools, the main framework maintenance BPA (F1-MainProc) did not perform a Read of the BO when a pre-processing script was linked to the BO via options. The pre-processing script was responsible for the Read.

In a subsequent release, a BO Read was added in F1-MainProc (even if a pre-processing script existed) to resolve a UI Hint issue related to child business objects. This solution introduced a problem only visible for specific scenarios and a different fix has been introduced. The new fix made the BO Read unnecessary in F1-MainProc. Because there are many pre-processing scripts that are properly performing the Read of the BO, ideally the BO Read should be removed from F1-MainProc so that multiple reads are not performed. However, there may have been pre-processing scripts introduced after the BO Read was included in F1-MainProc that were coded to not perform a BO read in the pre-processing script. Due to this situation, the BO Read is still performed as part of the processing of F1-MainProc.

When a pre-processing script exists, we plan to remove the BO Read from F1-MainProc logic. You should review your custom pre-processing scripts that are linked to your BO options to ensure that they properly perform a Read of your BO.