

Oracle Utilities Digital Asset Management

Release Notes

Release 2.0.0.0.0

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Oracle Utilities Digital Asset Management Release 2.0.0.0.0 Release Notes

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Contents

Preface	1-1
Audience	1-2
Related Documents	1-2
Updates to Documentation.....	1-2
Conventions.....	1-2
Acronyms	1-3
Additional Resources	1-3
Chapter 1	
Release Notes	1-1
About This Release.....	1-2
Supported Platforms	1-2
Supported Integrations	1-2
Demo Data Information	1-2
User Configuration.....	1-2
Digital Asset Management Functional Overview.....	1-3
Customer Information Functionality.....	1-3
Device Management Functionality.....	1-4
Event Management Functionality.....	1-5
Integrations	1-5
Known Issues in This Release	1-9

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 V2.0.0.0.0.

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

- *Oracle Utilities Digital Asset Management Security Guide*
- *Oracle Utilities Digital Asset Management 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.
<i>italic</i>	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

The following acronyms and terms are used in this document:

Acronym	Definition
CCB	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
OUIAF	Oracle Utilities Application Framework
DAM	Oracle Utilities Digital Asset Management

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 V2.0.0.0.0 including new functionality, known issues, and other important information.

This guide includes the following:

- [About This Release](#)
- [Supported Platforms](#)
- [Demo Data Information](#)
- [User Configuration](#)
- [Digital Asset Management Functional Overview](#)
- [Known Issues in This Release](#)

Refer to the *Quick Install Guide* and *Installation Guide* for information regarding supported platforms and installation steps.

About This Release

This section contains general information about this release of Oracle Utilities Digital Asset Management 2.0.0.0.0. The release includes the following components:

- Oracle Utilities Digital Asset Management 2.0.0.0.0
- Oracle Utilities Application Framework v4.5.0.1.0

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 Digital Asset Management 2.0.0.0.0 to ensure you have the most current version of this product.

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 2.0.0.0.0 Integration to Oracle Utilities Distributed Energy Resources Management System

Note: Version numbers listed below are supported as of the v2.0.0.0.0 release (January 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.

Digital Asset Management Functional Overview

This section provides an overview of the functionality provided in this release of Oracle Utilities Digital Asset Management including the following:

- [Customer Information Functionality](#)
- [Device Management Functionality](#)
- [Event Management Functionality](#)
- [Integrations](#)

Customer Information Functionality

Program Management

Demand Response programs enable utilities to temporarily take control of your customers' controllable devices or assets during periods of high demand. For example, your customers may subscribe to a program that adjusts the thermostats of their controllable devices during a heat wave or that disables electric vehicle chargers during a period of peak energy usage.

You create and manage Demand Response programs by defining the following attributes:

- Program Type - Defines certain parameters and attributes of a class of programs.
- Status - Indicates the current status of the program. Only "Active" programs are eligible for customer enrollment and events.
- External ID - Unique identifier of the program, which external systems reference.
- Approval Profile - Approval process used by the program.
- Suspend - Indicates whether the program is suspended or not. Set to "No" by default.
- Start Date - The date when the program became active and available.
- End Date - The date when the program became inactive and unavailable.
- Division - The operating company or division within a large conglomerate of utilities associated with the program.

In addition, you can define these objects and data to your demand response programs:

- Program Specifications - One or more specifications for devices eligible for the program. Determine the eligibility of customers to enroll in the program based on their controllable device.
- Program Rates - Determine the eligibility of customers to enroll in the program based on their Rates subscriptions.
- Program Qualifications - Determine the eligibility of customers to enroll in the program based on their responses to Customer Questions.
- Program Rules - One or more program rules associated with the demand response program. The product uses the rule with the latest effective date/time when there are more than one program rules.
- Program Events - Program events associated with the demand response program.

These programs provide customers with rewards like a billing settlement.

Refer to the following sections of the *Administrative User Guide* for more information:

- Understanding Customer Questions
- Understanding Program Rules
- Program Events

Program Subscription

Program subscriptions link a customer with a program and, in most cases, a device location. In the case of devices which the utility provides and installs at the customer's location, the enrollment process also creates a work activity used to schedule a crew to install the device, and a device location once the device has been installed.

You manage program subscriptions through an enrollment API, process flow, and Digital Asset Enrollment Request Task Type. These support Self-Service, Bring-your-Own-Device, and Contact Center Agent-driven enrollments. The process flow provides repeatable and easy-to-follow enrollment steps.

The Digital Asset Enrollment Request Task Type sets up the master data (enrollment request processing) and controllable devices. In addition, the Service Task Type configuration contains the device setup actions that the enrollment request task performs, which are based on the Enrollment Requests Installation Method (Self Installation, Utility Installation, or Ship Device) and Asset Ownership (Customer Owned or Utility Owned). The device setup actions can include To Do entry creation, field activity, field task, or controllable device command activity.

The program subscription links the customer to a program and device location where controllable devices are installed.

Device Management Functionality

Operational Device Management

Manage all program-related devices in Oracle Utilities Digital Asset Cloud Service with:

- Device Attributes/Specifications
- Inventory and Purchasing
- Device/Asset Maintenance

You maintain the device attributes or specifications to associate with the program in Engineering Specification and Maintenance Specification. Oracle Utilities Digital Asset Cloud Service fully supports inventory and purchasing capabilities, as well as work and asset maintenance processes for program devices.

These programs allow you to manage devices using familiar functionality and business processes.

Event Management Functionality

Demand Response Event Management

Program Events represent instances of utilities temporarily taking control of controllable devices or assets during periods of high demand. For example, utilities adjust the thermostats of controllable devices during a heat wave to alleviate demand.

The Demand Response Event Management identifies and reserves controllable devices, and orchestrates the following for a program event:

- Control Cost Calculations
 - Identifies the lowest cost devices for participation in an event through program rules and configurable Score calculation.
 - Initiates a Device Score calculation by a batch control, individual device, or automatically after taking control of a device.
 - Stores the previous score and initiates the sending of a new score to Network Management System when the Control Score changes.
- Event Reservations
 - Lists the devices reserved for a program event that meet the Demand Response reduction goals.
- Event Participation Tracking
 - Follows the outcome of the reserved and non-responsive devices' active participation, opt-outs, or overrides as the program event occurs.
 - Feeds back event participation data, which Oracle Utilities Digital Asset Management uses for ongoing device control cost calculation.
- Capture and Process Settlement Data
 - Captures the event device participation details at the conclusion of an event to process customer settlements.

This provides the data necessary for settlement calculation.

Integrations

Refer to the *Oracle Utilities Digital Asset Cloud Service - Distributed Energy Resources Management Configuration Guide* for more information about the following integration functionality.

Controllable Device - Communication Status Check Request

The pre-built Oracle Integration Cloud (OIC) Device Status Check integration flow enables Oracle Utilities Digital Asset Management to request the most recent communication status of a controllable device, as part of the enrollment process or when contact center agents troubleshoot non-responsive devices, by initiating an outbound message to Oracle Utilities Distributed Energy Resources Management grid edge devices.

Oracle Utilities Distributed Energy Resources Management grid edge devices periodically receive a feed of the communication status for all controllable devices from external entities like aggregators or head-end systems and store the feed as the most recent communication status. The OIC Device Status Check integration flow follows an asynchronous pattern (for example, receiving the actual device status response in a different flow initiated from Oracle Utilities Distributed Energy Resources Management grid edge devices) as latency can occur when receiving the most recent communication status from external entities. In addition to a unique message identifier to allow the asynchronous response to be correlated, each Device Status Check request needs to provide the device communication identifier (NIC ID) along with its head-end system identifier for Oracle Utilities Distributed Energy Resources Management grid edge devices to uniquely identify a controllable device and retrieve its most recent communication status.

The integration flow transforms the source request to match the target specifications and calls the device Status Check service exposed by Oracle Utilities Distributed Energy Resources Management grid edge devices. It is capable of handling business and technical errors, and you can configure it to send email notifications about the errors during processing.

This pre-built Oracle Integration Cloud flow ensures communication between the controllable device and utilities during a program event. This also lowers project implementation costs, duration, risk, and total cost of ownership.

Controllable Device - Communication Status Check Response

The pre-built Oracle Integration Cloud (OIC) Device Status Check Ack integration flow enables Oracle Utilities Distributed Energy Resources Management grid edge devices to send the asynchronous device status response to Oracle Utilities Digital Asset Management to facilitate a successful program enrollment or an agent-initiated troubleshooting of non-responsive devices. The asynchronous device status response includes the following information:

- Unique Message Identifier - Allows the correlation of the response and received as part of the Controllable Device Status Check request. Received as part of the Controllable Device Status Check.
- Device Identifier - Uniquely identifies the device across applications. A combination of the Network Interface Card and Head-End System IDs.
- Response Code - Indicates "SUCCESS" or "FAILURE" for the most recent communication status.

The integration flow transforms the source request to match the target specifications and invokes the Oracle Utilities Digital Asset Management Inbound Web Service.

This pre-built Oracle Integration Cloud flow ensures that Oracle Utilities Digital Asset Management receives the communication status check response for a controllable device. This also lowers project implementation costs, duration, risk, and total cost of ownership.

Customer-Owned Controllable Devices - Enrollment Request Initiation

The pre-built Oracle Integration Cloud (OIC) Enrollment Request integration flow enables customers with Bring-Your-Own controllable device (like smart thermostats) to initiate enrollment to the utility's program through authorized external entities such as Energy Aggregators or Head-End System providers. The Oracle Utilities Distributed Energy Resources Management grid edge devices periodically calls the integration flow to transfer a collection of enrollment requests to Oracle Utilities Digital Asset Management. Additionally, Oracle Utilities Distributed Energy Resources Management grid edge devices receive and store the following after the customer initiates enrollment:

- Customer Information
 - Customer Name, First Line of Address, and Postal/ZIP Code
 - This information serves as the unique identifier for the customer
- Program Information
 - Program Name and Start Date
 - This information checks the customers eligibility to the program and maps them to existing programs
- Device Information
 - Device Specification (including the Network Interface Card ID, which is the unique communication identifier)

This information ensures a successful registration of the device

For each individual customer enrollment record set, the OIC Enrollment Request integration flow maps the source data to the target specifications and calls the Create Digital Asset Enrollment inbound web service within the Opower Utilities Digital Asset Management. The integration flow is capable of handling business and technical errors, and you can configure it to send email notifications about errors during processing.

This pre-built Oracle Integration Cloud flow provides a seamless experience for enrollments via external entities like aggregators or head-end systems. This also lowers project implementation costs, duration, risk, and total cost of ownership.

Note: The initial release of Oracle Utilities Digital Asset Management and Oracle Utilities Grid Edge Distributed Energy Resources Management focuses on supporting enrollments of customer-owned demand response devices. Similarly, the OIC integration flows currently support the edge application functionality. In the future, these will be extended to support Distributed Energy Resources assets.

Controllable Device - Enrollment and Disenrollment Synchronization

The pre-built Oracle Integration Cloud (OIC) Enrollment Sync integration flow enables Oracle Utilities Digital Asset Management to send a synchronization request to update the controllable device information and its program subscription status in Oracle Utilities Distributed Energy Resources Management grid edge devices after an enrollment to or unenrollment from a program. The enrollment orchestration within Oracle Utilities Digital Asset Management sets up the relationship between the customer (Contact and Location), the customer's controllable device, and associated program.

A successful enrollment of the customer and controllable device in Oracle Utilities Digital Asset Management triggers an outbound synchronization request to notify Oracle Utilities Distributed Energy Resources Management grid edge devices of the controllable device's evaluation to participate in an upcoming event. Similarly, the disenrollment of the customer and controllable device in Oracle Utilities Digital Asset Management triggers an outbound synchronization request to notify Oracle Utilities Distributed Energy Resources Management grid edge devices of the controllable device's ineligibility for evaluation to participate in an upcoming event.

Data synchronization between Oracle Utilities Customer Information System and Oracle Utilities Distributed Energy Resources Management grid edge devices is a prerequisite for the OIC Enrollment Sync integration flow. Data synchronization ensures updated customer contact and location information, and that the integration flow only passes identifiers.

The integration flow transforms the source request to match the target specifications and calls the enroll service within Oracle Utilities Distributed Energy Resources Management grid edge devices.

This pre-built Oracle Integration Cloud flow ensures the evaluation of eligible devices for program event participation.

Controllable Device - Calculated Score File

The pre-built Oracle Integration Cloud (OIC) Send Device Score integration flow retrieves the controllable device calculated score file, containing the most recent device score value and availability flag, and transfers it from Oracle Utilities Digital Asset Management to Oracle Utilities Distributed Energy Resources Management grid edge devices for evaluation in event participation. The integration flow transfers the calculated score file on a daily basis or on an agreed frequency to provide optimal selection of devices for an event. The integration flow ensures the most recent device score is available to evaluate the controllable device's eligibility to participate in an upcoming event. You can configure if email notifications are sent to designated end users for errors encountered during the file transfer.

Oracle Utilities Digital Asset Management computes and maintains the device score for each controllable device based on factors like equipment specifications, monthly or annual capacity, device participation history, and so on. It periodically publishes a file containing the latest device score and its availability. Oracle Utilities Distributed Energy Resources Management grid edge devices use the most recent device score to rank the controllable devices and create a portfolio of devices for an upcoming event.

This pre-built Oracle Integration Cloud flow ensures the transfer of the Calculated Score file from Oracle Utilities Digital Asset Management to Oracle Utilities Distributed Energy Resources Management grid edge devices, and the evaluation of eligible devices for program event participation.

Controllable Device - Pre-Event Device Reservation

The pre-built Oracle Integration Cloud (OIC) Device Reservation integration flow enables Oracle Utilities Distributed Energy Resources Management grid edge devices to send the device reservation file that contains the event details and list of devices reserved for the event. The OIC Device Reservation integration flow reads the file in segments, transforms the information to match the target specifications, and calls the Create Device Reservation operation within the Program Event Participation Inbound Web Service in

Oracle Utilities Digital Asset Management. It is capable of handling business and technical errors, and you can configure it to send email notifications about the errors during processing.

Oracle Utilities Distributed Energy Resources Management grid edge devices generate a portfolio of devices to participate in an upcoming event based on factors like controllable device calculated score, forecasted reduction, and more. Portfolio generation takes into consideration that a percentage of devices will fail the evaluation to participate due to reasons such as pre-event customer opt-outs, non-responsive devices, and manual event overrides. Oracle Utilities Distributed Energy Resources Management grid edge devices publishes the event information and list of devices reserved for the event as a file and Oracle Utilities Digital Asset Management uses the file to track event participation and calculate device scores.

This pre-built Oracle Integration Cloud flow ensures the timely sending of notifications to customers and accurate device score calculation.

Controllable Device - Pre-Event Cancellation

The pre-built Oracle Integration Cloud (OIC) Pre-Event Cancellation integration flow allows Oracle Utilities Distributed Energy Resources Management grid edge devices to send event cancellation messages prior to the scheduled event start time. The integration flow transforms the source message to match the target specifications and calls the Pre-Event Cancellation operation within the Program Event Participation Inbound Web Service in Oracle Utilities Digital Asset Management. It is capable of handling business and technical errors, and you can configure it to send email notifications to designated end users about the errors during processing.

Based on actual grid conditions and other factors, the grid operations team can cancel a scheduled event using Oracle Utilities Distributed Energy Resources Management grid edge devices. The integration flow informs Oracle Utilities Digital Asset Management about the event cancellation and the cloud service updates the event participation accordingly for previously reserved devices of that event and factor the pre-event cancellation while calculating device scores. The event cancellation update also allows Oracle Utilities Digital Asset Cloud Service to send notifications. The pre-event cancellation message from Oracle Utilities Distributed Energy Resources Management grid edge devices only contains information about the canceled event.

This pre-built Oracle Integration Cloud flow ensures the synchronization and update of event reservation and cancellation details, and timely sending of notifications to customers and accurate device score calculation.

Known Issues in This Release

There are no known issues in this release.