Oracle Utilities Digital Asset Cloud Service Integration to Oracle Utilities Grid Edge Distributed Energy Resources Management System

Release Notes Release 23A F77399-01

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Oracle Utilities Digital Asset Cloud Service Integration to Oracle Utilities Grid Edge Distributed Energy Resources Management System Release Notes, Release 23A

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Preface

Welcome to the Oracle Utilities Digital Asset Cloud Service Integration to Oracle Utilities Grid Edge Distributed Energy Resources Management System Release Notes for 23A.

The preface includes the following:

- Audience
- Documentation and Resources
- Documentation Accessibility
- Conventions
- Acronyms

Audience

This document is intended for anyone implementing the Oracle Utilities Grid Edge Distributed Energy Resources Management System integration to Oracle Utilities Digital Asset Cloud Service.

Documentation and Resources

For more information regarding this integration, foundation technology and the edge applications, refer to the following documents:

Product Documentation

Topic	Location
Oracle Utilities Digital Asset Cloud Service Integration to Oracle Utilities Grid Edge Distributed Energy Resources Management System documentation	https://docs.oracle.com/en/industries/energy- water/integrations-index.html
Oracle Utilities Network	https://docs.oracle.com/en/industries/energy-
Management System documentation	water/network-management-system/
Oracle Utilities Digital Asset Cloud	https://docs.oracle.com/en/industries/energy-
Service documentation	water/digital-asset-cloud-service/

Additional Documentation

Resource	Location
Oracle Integration Cloud Service documentation	Refer to the OIC documentation at: https://docs.oracle.com/en/cloud/paas/ integration-cloud/index.html
Oracle Support	Visit My Oracle Support at https:// support.oracle.com regularly to stay informed about updates and patches.
	Refer to the <i>Certification Matrix for Oracle Utilities Products (Doc ID 1454143.1)</i> on My Oracle Support to determine if support for newer versions of the listed products is included.
	For more information, refer to the Oracle Utilities Integrations page at http://my.oracle.com/site/tugbu/productsindustry/productinfo/utilities/integration/index.htm
Oracle Technology Network (OTN) Latest versions of documents	http://www.oracle.com/technetwork/index.html
Oracle University for training opportunities	http://education.oracle.com/

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers have access to electronic support for the hearing impaired. Visit: http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs

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

The following terms are used in this document:

Term	Expanded Form
DERMS	Oracle Utilities Grid Edge Distributed Energy Resources Management System
DACS	Oracle Utilities Digital Asset Cloud Service
OIC	Oracle Integration Cloud

Chapter 1

Release Notes

This release notes outline the information about the functionality in integrating Oracle Utilities Digital Asset Cloud Service with Oracle Utilities Grid Edge Distributed Energy Resources Management System. Each section includes a brief description of the feature, the steps to enable or start using the feature, and any tips or considerations.

The release notes focuses on the following:

- Overview
- Supported Applications
- About Oracle Utilities Digital Asset Cloud Service
- About Oracle Utilities Grid Edge Distributed Energy Resources Management System
- About Oracle Integration Cloud
- New Features Summary
- Known Issues

Overview

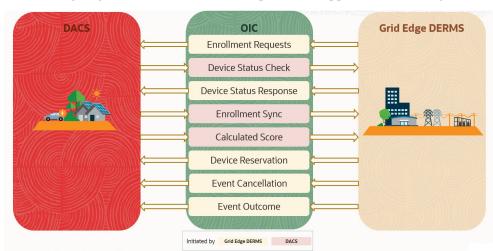
Oracle Utilities Digital Asset Cloud Service integration to the Oracle Utilities Grid Edge Distributed Energy Resources Management System component facilitates the exchange of information related to controllable devices at a customer's premise. This integration can be leveraged to support customer enrollment, unenrollment, controllable device replacement, and program event participation.

For more information about the functionality, refer to the *Oracle Utilities Digital Asset Cloud Service Integration to Oracle Utilities Grid Edge Distributed Energy Resources Management System Configuration Guide* included in this release. The documentation is available on Oracle Help Center at: https://docs.oracle.com/en/industries/energy-water/integrations-index.html

This integration supports the following flows:

- Sending program enrollment requests for customer owned controllable devices from Oracle Utilities Grid Edge Distributed Energy Resources Management System to Oracle Utilities Digital Asset Cloud Service.
- Initiating the controllable device status check request from Oracle Utilities
 Digital Asset Cloud Service and receiving the controllable device status response
 from Oracle Utilities Grid Edge Distributed Energy Resources Management
 System.
- Synchronizing the customer, controllable device, and program subscription information from Oracle Utilities Digital Asset Cloud Service to Oracle Utilities Grid Edge Distributed Energy Resources Management System.
- Transferring the controllable device calculated score values from Oracle Utilities
 Digital Asset Cloud Service to Oracle Utilities Grid Edge Distributed Energy
 Resources Management System.
- Sending event creation and device reservation information from Oracle Utilities Grid Edge Distributed Energy Resources Management System to Oracle Utilities Digital Asset Cloud Service.
- Notifying Oracle Utilities Digital Asset Cloud Service of any pre-event cancellations initiated in Oracle Utilities Grid Edge Distributed Energy Resources Management System.

The following diagram illustrates the business processes supported in this integration.



In this integration, Oracle Integration Cloud is used as a middleware to connect the applications. It uses REST APIs to facilitate communication between these two applications.

Supported Applications

The following table shows the supported application versions in this integration:

Application	Version
Oracle Utilities Digital Asset Cloud Service	23A or higher
Oracle Utilities Grid Edge Distributed Energy Resources Management System	V2.6.0.0.0 or higher
Oracle Integration Cloud	V23.1.3.0.0 or higher

Refer to the *Certification Matrix for Oracle Utilities Products (Doc ID 1454143.1)* on My Oracle Support to determine if support for newer versions of the listed products is included.

About Oracle Utilities Digital Asset Cloud Service

Oracle Utilities Digital Asset Cloud Service provides the core functionality for utilities to create, run, and maintain demand response and distributed energy resource programs. It comprises the following functional areas:

- Asset and Device Management: Maintenance of controllable assets, such as "smart" thermostats, electric vehicle chargers, storage batteries, and other types of devices.
- **Program Enrollment/Unenrollment**: Identifying specific customers that are eligible for particular programs, and establishing relationships between the customers, the programs, and if appropriate, device locations where one or more controllable devices are (or have been) installed.
- Program Management: Creation and maintenance of Demand Response
 Programs to which customers can subscribe and which allows utilities to
 temporarily alter the settings of specific devices in their homes as a response to
 periods of high demand.
- Program Subscriptions: Maintenance of a customer's program subscriptions
 that represent the customer's enrollment in a program and device registration.
 Program subscriptions link the customer to a program and device location where
 controllable devices are installed.
- **Demand Response Event Management**: Identification and reservation of a customer's controllable devices in response to usage demand.

About Oracle Utilities Grid Edge Distributed Energy Resources Management System

Oracle Utilities Grid Edge Distributed Energy Resources Management System is built on Oracle Utilities Network Management System (NMS). It adds incremental support to the Oracle Utilities Network Management System platform for the management of behind the meter demand response resources. Oracle Utilities Grid Edge Distributed Energy Resources Management System can initiate control signals to devices inside customer homes, such as smart thermostats. Oracle Utilities Network Management System facilitates the modeling of individual Demand Response devices down to the customer service point and/or aggregated to load transformers to support Oracle Utilities Network Management System driven optimization. In conjunction with Oracle Utilities Network Management System the Oracle Utilities Grid Edge Distributed Energy Resources Management System component can help optimize electrical networks both operationally and commercially.

Oracle Utilities Grid Edge Distributed Energy Resources Management System offers strategy templates to be used for forecasting for various scenarios during event management. It provides event functions that help grid operators manage and review the forecasted impact of an event. This includes the ability to nominate, approve or reject an event; monitor or cancel an ongoing event and audit historical events. Oracle Utilities Grid Edge Distributed Energy Resources Management System supports automatic generation of event stages (blocks of field device activity) for configured objectives. Stages are built based on cost scores and reduction forecasts received from external applications used to help monitor and manage the Demand Response programs.

About Oracle Integration Cloud

Oracle Integration Cloud is a unified platform to integrate the applications, automate processes and create applications.

Using integrations, connect the applications into a continuous business flow. The integrations can be quickly developed and activated between both the cloud and on-premises applications. The lookups help to match application-specific codes between the two applications. Oracle Integration Cloud provides graphical mapper where the user can map just by dragging and dropping between the applications.

New Features Summary

The following new features were included in this integration:

Event Outcome

Event Outcome

Oracle Utilities Grid Edge Distributed Energy Resources Management System will dispatch a control signal via Oracle Utilities Live Energy Connect to a controllable device identified for a demand response event. Once the duration of the event is over, it is expected that each controllable device will respond back with an event outcome to indicate if it successfully participated, or the event was manually overridden by the

customer, or the device was non-responsive during the event, or the control signal was rejected by the controllable device. Oracle Utilities Live Energy Connect will receive the event outcome from external sources and pass that on to Oracle Utilities Grid Edge Distributed Energy Resources Management System.

This integration flow includes:

- Receiving the post Event Device outcome as a flat file attachment from Oracle
 Utilities Grid Edge Distributed Energy Resources Management System
 containing the event information and device level outcomes.
- Transforming the event outcome message and invoking the Oracle Utilities Digital Asset Cloud Service process for posting the event outcome.
- Send an acknowledgment back to Oracle Utilities Grid Edge Distributed Energy Resources Management System when all records from the event outcome file is processed.

Known Issues

There are no known issues at the time of this integration release.