

Oracle Utilities Smart Grid Gateway

Release Notes for:

- Service Order Management
- Adapter for Echelon
- Adapter for Itron OpenWay
- Adapter for Landis+Gyr
- Adapter for Sensus RNI
- Adapter for Silver Spring Networks
- MV90 Adapter for Itron
- Adapter Development Kit

Release 2.1.0 Service Pack 3

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Oracle Utilities Smart Grid Gateway Release Notes

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Preface

These release notes describe enhancements and known issues for Oracle Utilities Smart Grid Gateway version 2.1.0.3 (also referred to as version 2.1.0 Service Pack 3).

Audience

Oracle Utilities Smart Grid Gateway Release Notes is intended for anyone installing or using the Oracle Utilities Smart Grid Gateway.

Related Documents

The following documentation is included with this release.

Installation Guides and Release Notes

- *Oracle Utilities Smart Grid Gateway Release Notes*
- *Oracle Utilities Smart Grid Gateway Quick Install Guide*
- *Oracle Utilities Smart Grid Gateway Installation Guide*
- *Oracle Utilities Smart Grid Gateway Database Administrator's Guide*
- *Oracle Utilities Application Framework Release Notes*

Configuration and User Guides

- *Oracle Utilities Service and Measurement Data Foundation User's Guide*
- *Oracle Utilities Smart Grid Gateway Configuration Guide*
- *Oracle Utilities Smart Grid Gateway Adapter Configuration Guide*
- *Oracle Utilities Smart Grid Gateway Adapter User's Guide*

Framework Documents

- *Oracle Utilities Application Framework Business Process Guide*
- *Oracle Utilities Application Framework Administration Guide*

Supplemental Documents

- *Oracle Utilities Smart Grid Gateway Batch Server Administration Guide*
- *Oracle Utilities Smart Grid Gateway Server Administration Guide*
- *Oracle Utilities Smart Grid Gateway Security Guide*

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.

Chapter 1

Release Notes

These release notes contain the following sections:

- [About This Release](#)
- [Supported Upgrades](#)
- [Supported Platforms](#)
- [Database Changes](#)
- [New Functionality](#)
- [Oracle Utilities Application Framework Enhancements](#)
- [Known Issues](#)
- [Supported Integrations](#)
- [Demo Data Information](#)

About This Release

This section contains general information about Oracle Utilities Smart Grid Gateway version 2.1.0.3 (also referred to as version 2.1.0 Service Pack 3). This release of Oracle Utilities Smart Grid Gateway includes the following components:

- Oracle Utilities Application Framework 4.2.0.3
- Oracle Utilities Service and Measurement Data Foundation 2.1.0.3

Note: In previous releases, Oracle Utilities Service and Measurement Data Foundation was referred to as Oracle Utilities Meter Data Framework.

Please visit My Oracle Support (<http://support.oracle.com>) for the most recent service packs and patches for this release to ensure you have the most current version of this product.

Supported Upgrades

Version 2.1.0.3 supports the following upgrade paths:

- If you are installing Oracle Utilities Smart Grid Gateway for the first time, you must install version 2.1.0.3, available on the Oracle Software Delivery Cloud.
- If you have Oracle Utilities Smart Grid Gateway version 2.1.0.1 or version 2.1.0.2 installed, you can upgrade to version 2.1.0.3 directly. If you have version 2.1.0.0, you must upgrade to 2.1.0.1 and then to 2.1.0.3.
- If you have Oracle Utilities Smart Grid Gateway version 2.0.0.9 installed, you can upgrade to version 2.1.0.3 directly.

Supported Platforms

Please refer to the *Oracle Utilities Smart Grid Gateway Quick Installation Guide* included in this release for an updated list of supported platforms.

Supported Head-End Systems

The following table lists the supported head-end systems and protocols for this release of the Oracle Utilities Smart Grid Gateway adapters:

Adapter	Currently Supported Version	Protocol
Adapter Development Kit	NA	MultiSpeak 4.1
Adapter for Echelon	Echelon NES 5.2	Proprietary
Adapter for Itron OpenWay	6.1	Proprietary
Adapter for Landis+Gyr	Gridstream Command Center 6.3	MultiSpeak v3.1
Adapter for Sensus RNI	Sensus RNI 3.1	MultiSpeak 3.0 & 4.1. RNI 3.1 and the SGG Sensus RNI adapter support MultiSpeak 4.1
Adapter for Silver Spring Networks	UtilityIQ Versions 4.10	Proprietary
MV90 Adapter for Itron	.mv9 binary, mainframe data format	Binary file format

Database Changes

Version 2.1.0.3 includes the following database enhancements:

- Index D1T304S2 has been restored in order to enable batch job D1-GNIMD to run successfully
- Index D1M100S13 has been introduced in order to support performance of batch job D1-CSPSR

New Functionality

This section describes new features and functionality in this release of Oracle Utilities Smart Grid Gateway, including:

- [Service Order Management](#)
- [Adapter for Itron OpenWay Enhancements](#)
- [Adapter for Echelon Enhancements](#)
- [Adapter for Landis +Gyr Enhancements](#)
- [Adapter for Silver Spring Networks Enhancements](#)
- [Support for Information Lifecycle Management](#)

Oracle Utilities Service Order Management (SOM) delivers the first of its kind solution for service order automation designed specifically for utility process optimization in the age of smart meter technology.

By redefining how utility platforms handle service order requests and data, Oracle Utilities SOM gets utilities up and running quickly, and continues to push process optimization even as the utility platform evolves. Key components of SOM are:

- Prebuilt accelerator workflows to help jumpstart system implementations and reduce cost. These workflows are highly configurable to fit a utility's unique business requirements, and represent some of the most commonly executed field activities within a modern utility for both meters and items.
 - Enable/Disable Service
 - Disconnect for non-payment / reconnect for payment
 - Back to back (Move-in / Move-out)
 - Meter Exchange
- Pre-configured Integration to reduce data redundancy and sync related processing and expense
 - Directly integrated to Oracle Utilities Smart Grid Gateway and its library of AMI adapters
 - Pre-integrated with Oracle Utilities Customer Care and Billing, Oracle Utilities Meter Data Management and Oracle Utilities Mobile Workforce Management
- Management Dashboard
 - Provides one centralized application to view all service orders and activities
 - Highlights processing inefficiencies and enable process improvements via trend analysis
 - Drill-down capabilities from summary data to individual workflows

Adapter for Itron OpenWay Enhancements

The Adapter for Itron OpenWay now supports Itron OpenWay version 6.1.

Adapter for Echelon Enhancements

The Adapter for Echelon now supports Echelon NES 5.2.

Adapter for Landis +Gyr Enhancements

The Adapter for Landis+Gyr now supports Command Center 6.3.

New Commands

Support for the following new commands added:

- [CIM On Demand Read](#)
- [Demand Reset](#)

CIM On Demand Read

This new command is intended to be called by the AMI vendor in lieu of a more traditional meter ping command. The key use case is for outage restoration verification processes and the CIM On Demand Read will be sent all the way to the meter itself to confirm connectivity. This fact makes the command superior to the existing MultiSpeak based on demand reads command for outage verification processing.

In addition to restoration verification processing, the new CIM on demand read functionality will also provide the ability to return an interval on demand read. The functionality was not previously available for this adapter using the MultiSpeak based on demand read.

Demand Reset

This is the first adapter for which this new command will be offered. This command enables customers to reset demand counters on traditional demand meters. The intended use for this command within SGG is that it is used for ad-hoc demand resets, whereas the monthly billing demand reset is typically managed by the billing or head-end system directly. This command supports execution against multiple meters, and will also return the demand value.

Usage Converter Enhancements

- **EMED:** The existing Landis+Gyr EMED usage converters were enhanced. First, the Volts and PF fields are now being mapped to IMD XML so that IMDs can be created within Oracle Utilities Meter Data Management for these two values. In the past this was not supported and customization to the converter was required.
- **Custom Fields:** The EMED file format from Landis+Gyr supports the addition of 0-255 custom fields. The original version of the Adapter did not support this functionality. With this release, the custom fields will now be added to the XML that is being sent to MDM. No downstream processing of these fields is included as these fields are custom and hence the handling of these fields will also be custom and need to be defined by the implementation team
- **Interval Status Codes:** The Landis+Gyr Enhanced Interval format is now supported in the Adapter. This format supports 2 character interval status codes that were not supported in the Landis+Gyr Interval file format

Adapter for Silver Spring Networks Enhancements

The Adapter for SSN UIQ now supports UIQ version 4.10.

Support for Information Lifecycle Management

Oracle Information Lifecycle Management leverages Oracle database technologies including partitioning to allow implementation of data lifecycle policies that optimize storage efficiency. Oracle Utilities Meter Data Management and Oracle Utilities Smart Grid Gateway have been enhanced to support the management of data for the major transactional objects in the system,

including Initial Measurement, VEE Exception, Device Event, Activity, Communication In/Out, Completion Event, and Usage Transaction, along with Oracle Utilities Application Framework objects Inbound and Outbound Sync Request, Outbound Message, and To Do Entry. (Note that the Measurement table has recommended partitioning based on the measurement date/time, and this table's partitions can be managed via Oracle ILM.). The main table of each object listed above has been expanded to include a dedicated ILM Date and ILM Archive Switch that are managed by the system. The ILM date provides an approximate age of the data and can be used as a means of partitioning the data. The ILM Archive Switch indicates whether an object can safely be removed from the system if desired. System-generated prime keys for objects that have been removed from the system are preserved, and the Oracle Utilities Application Framework ensures that appropriate error messages are produced whenever a key is referenced online for an object that has been removed from the system.

Oracle Utilities Meter Data Management and Oracle Utilities Smart Grid Gateway now provide logic for population of the ILM date as well as setting the ILM archive switch for the above-mentioned objects. The ILM date is set for each object upon its creation, and select objects reference a new ILM Master Configuration to affect the retention period of records of different classes. For example, the retention periods for activities of different categories – Payload Statistics, Command Requests, Event Suppression Requests, Outages, etc. – can be assigned different values. Likewise, device events' retention periods can be segmented by category, and initial measurements' retention periods can be segmented by scalar vs. interval, and further by UOM. In the process of flagging objects as eligible to archive, ILM eligibility algorithms are supplied that ensure that a group of related objects is marked for archive at the same time. One example is that an activity will not be marked for archive until the maximum ILM date is reached for all of its child objects: child activities, outbound communications, inbound communications, and completion events. Certain objects can also be marked for archive independently of their related parents (for example, VEE exceptions can be flagged without marking the corresponding IMD). The process of scanning objects for archive is performed by a set of ILM crawler batch processes which are configured on each maintenance object and displayed on ILM Master Configuration.

Oracle Utilities Application Framework Enhancements

This release includes Oracle Utilities Application Framework version 4.2.0 Service Pack 3, which includes enhancements. For information about these enhancements, refer to the following documents:

- The *Oracle Utilities Application Framework Service Pack 3 (V4.2.0.3) Release Notes*. This document provides information about specific framework modifications and is included in the documentation delivered with this release.
- The Oracle Utilities Application Framework administration guide and business process guide. These documents are included with the documentation that is delivered with this release.

Known Issues

This section describes known issues in Oracle Utilities Smart Grid Gateway version 2.1.0.3 at the time of release. Single fixes for these issues will be released at a later date.

Adapter for Landis+Gyr Known Issues

This following table lists known issues in the Adapter for Landis+Gyr version 4.1.0 at the time of this release.

Bug Number	Description
20907151	Async reading received after DemandReset needs to be targeted differently
20907209	CIM AMIEventSubscriber and CIM On-Demand Read need to share Inbound Web Services
20965517	CIM On Demand Read response cannot handle receiving more than one interval per reading type
20969290	12C Environment - Real-Time Event Process - Issue Loading Event to OUAF.

Service Order Management Known Issues

This following table lists known issues in Service Order Management at the time of this release.

Bug Number	Description
20901286	Cancel Orchestrator is not moving to completed state for pass through activities.

Oracle Utilities Application Framework Known Issues

This following table lists known issues in Oracle Utilities Application Framework at the time of this release.

Bug Number	Description
20924880	When processing real time JMS messages, error "... is an invalid user" is issued. The error is caused by the co-mingling of credentials between remote systems.

Please also refer to the *Oracle Utilities Application Framework Release Notes* for additional known issues at the time of this release.

Items Planned for Deprecation

This section describes items that will be deprecated in a future major release of Oracle Utilities Smart Grid Gateway:

- Oracle Weblogic 10.3.6
- Oracle Database 11g
- Internet Explorer 10.0 and previous versions
- Windows Server 2008 R2
- Oracle Enterprise Linux/ RedHat Enterprise Linux 5.8, 6.2, 6.3, 6.4
- Java 6
- Extract methodology leveraging Oracle Warehouse Builder with Oracle Utilities Analytics to move to Oracle Data Integrator/Golden Gate
- XAI Inbound Services to move to Inbound Web Services

Supported Integrations

The following integration is supported in this version of Oracle Utilities Smart Grid Gateway:

Oracle Utilities Smart Grid Gateway Integration for Outage Operations

This integration is supported for the following versions of Oracle Utilities Network Management System:

- v1.12.0.2
- v1.12.0.1
- v1.11.0.4

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 service pack. Please refer to the *Database Administrator's Guide* for more information about installing the demo database, or contact Oracle Support.