Oracle Utilities Smart Grid Gateway

Release Notes for:

Service Order Management
Adapter for Networked Energy Services
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 2.3.0.0

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Oracle Utilities Smart Grid Gateway Release Notes, Release 2.3.0.0

Contents

Preface

These release notes describe enhancements and known issues for Oracle Utilities Smart Grid Gateway, Release 2.3.0.0.

Audience

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 Smart Grid Gateway Licensing Information User Manual*

Configuration and User Guides
- *Oracle Utilities Meter Data Management / Oracle Utilities Smart Grid Gateway Business User Guide*
- *Oracle Utilities Meter Data Management / Oracle Utilities Smart Grid Gateway Administrative User Guide*

Supplemental Documents
- *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.
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.

Chapter 1

Release Notes

These release notes contain the following sections:

About This Release

This section contains general information about Oracle Utilities Smart Grid Gateway V2.3.0.0.0. This release of Oracle Utilities Smart Grid Gateway includes the following components:

- Oracle Utilities Application Framework 4.4.0.0

- Oracle Utilities Smart Grid Gateway 2.3.0.0.0

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.

Relationship Between 2.3.0.0.0 and Prior Versions

V2.3.0.0.0 supports the following upgrade paths:

- If you are installing Oracle Utilities Smart Grid Gateway for the first time, you must install V2.3.0.0.0, available on the Oracle Software Delivery Cloud.

- If you have Oracle Utilities Smart Grid Gateway V2.1.0.2 or earlier installed, you must upgrade to V2.1.0.3 and then to V2.3.0.0.0.

- If you have Oracle Utilities Smart Grid Gateway V2.1.0.3, you can upgrade to V2.3.0.0.0 directly.

- If you have Oracle Utilities Smart Grid Gateway V2.2.0.1 or V2.2.0.2 installed, you must upgrade to V2.2.0.3 and then to V2.3.0.0.0.

- If you have Oracle Utilities Smart Grid Gateway V2.2.0.3 installed you can upgrade to V2.3.0.0.0 directly.

Supported Platforms Notice

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 Networked Energy Services	Networked Energy Services NES 5.0, 5.3	Proprietary (NES specific)
Adapter for Itron OpenWay	6.6, 7.0 Itron OpenWay Operations Center SR 4.1, 4.5	Proprietary

Adapter	Currently Supported Version	Protocol
Adapter for Landis+Gyr	Gridstream Command Center 6.3, 6.5, 7.1	MultiSpeak v3.1
Adapter for Sensus RNI	Sensus RNI 3.1, 3.3	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 4.9, 4.10, 4.12	Proprietary
MV90 Adapter for Itron	.mv9 binary, mainframe data format	Binary file format

Database Changes

Refer to **Appendix F: Database Changes in Oracle Utilities Smart Grid Gateway** in the *Oracle Utilities Smart Grid Gateway Database Administrator's Guide* for details about database changes introduced in this release.

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:

- v2.3.0.x
- v1.12.0.x

Oracle Utilities Service Order Management Integrations

The following integrations used with Service Order Management are supported with this release:

- Oracle Utilities Customer Care and Billing 2.5.0+, 2.6.0, and 2.7.0 to Oracle Utilities Service Order Management 2.3.0.0.
- Oracle Utilities Service Order Management 2.3.0.0 to Oracle Utilities Mobile Workforce Management 2.2.0.x and 2.3.0+

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.

Enhancements

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

- Updated User Interface

Updated User Interface

The application's user interface has been updated with a new look and feel that features new colors, fonts, icons, and controls. See **New Style Sheets** on page 1-5 for more information.

Items Planned for Future Deprecation

This section describes items that Oracle plans to deprecate in a future release of Oracle Utilities Smart Grid Gateway:

- Adapter for Networked Energy Services

Oracle Utilities Application Framework V4.4.0.0 Release Notes

This section describes enhancements, system data details and deprecation notices in Oracle Utilities Application Framework v4.4.0.0.0 including:

- System Wide Enhancements
- To Do Enhancements
- External Messages Enhancements
- Miscellaneous Enhancements
- Oracle Utilities Application Framework Deprecation Notices

Note: The **Steps To Enable** sections provide guidelines for enabling each feature, where applicable.

System Wide Enhancements

New Style Sheets

The system's style sheet has been updated to incorporate a more modern color palette, spacing and icons.

Besides the general changes to colors and spacing, this change also includes the following more specific changes:

- The **Search Menu** widget, used to search for a page in the system that is found on a menu has been moved to be to the right of the Admin menu icon (for left to right languages).
- The **Expand** and **Collapse** icons for zones and sections have been stylized and moved to the right side of the zone (for left to right languages)
- Various icons throughout the system have changes, including zone level icons.
- In some cases, the context menu has been moved to the right of the information string instead of the left.
- Labels on maintenance pages and query pages are in ALL CAPS instead of title case.

Steps To Enable

No steps are required to enable this feature.

Marking a Filter Value in Error

In this release, the system has enhanced error handling for fixed page searches and zone based queries to correctly mark the field that has an error.

- For fixed page searches, if the field name of the field to mark is populated in the server message, the system will mark that field. If no field name is provided, the system will mark the first filter value in that section.

- For zones that have filters and a filter validation script, the system will mark the filter field in error based on the element referenced in the 'terminate with error' statement in the validation script.

Steps To Enable
No steps are required to enable this feature.

Notes
Customers should review custom filter validation scripts. If the field highlighted in an error is not the first field in the filter area, consider adding the schema element representing that filter value to the 'terminate with error' statement.

To Do Enhancements

This section provides information about enhancements to To Do Entry functionality.

To Do Pre-creation Algorithm on To Do Type
The system already supports a To Do pre-creation plug-in spot on Installation Options. Plug-ins in this plug-in spot are called for every To Do type in the system. In this release an analogous plug-in spot has been added on To Do Type. This allows for implementations to include To Do pre-creation logic that is specific for a To Do type.

The following describes more information about this feature:

- Algorithms for the new plug-in spot may be used to add or update characteristics for the new To Do entry. Implementations can use this capability to link specific related information for every To Do entry. This extra information can help users manage their To Dos using the new To Do Management portal. In addition, this captured information can be used in the Calculate Priority algorithm to automatically adjust the priority for a new To Do Entry.

- Algorithms for the new plug-in spot may be used to indicate that the To Do Entry should be suppressed. This allows for more granular conditions to be checked prior to see if the To Do entry is not needed / applicable.

- If at least one To Do pre-creation algorithm is plugged in on the To Do Type, only those algorithms are called. The Installation Option algorithms will not be called. However, the product has provided a To Do Type pre-creation algorithm that executes the installation option To Do pre-creation algorithms. This allows for implementations to control if the installation algorithms are also relevant and if so, when they should be executed.

Steps To Enable
Implementations must review whether any of their To Do Types could benefit from specific pre-creation algorithms, create the appropriate algorithms and plug them into the appropriate To Do Types.

It is recommended to review all your To Do entries to see if you make decisions about prioritization or assignment based on related information that may not be readily available on the To Do Entry (and currently your users need to drill in and perform extra steps to find this information). Consider providing an algorithm that creates a characteristic for any such information. The new To Do Management Portal supports filtering by and displaying characteristics linked to a To Do Entry. If information that

helps you manage your To Dos is visible in this one central location, it will allow your users to be more efficient. A note of caution that linking too many characteristics to each To Do can result in a decrease in system performance, which would then reduce your users' efficiency. Carefully consider each characteristic and balance the cost / benefit of each.

Implementations should also review the current Installation level To Do pre-creation algorithms and determine if they are overridden by the To Do Type level algorithms or if they should also be executed. To ensure the installation algorithms are executed, the base provided To Do Type - To Do pre-creation algorithm should be plugged in.

Implementation Tips and Considerations

Specific products may provide base algorithms for To Do Type - To Do pre-creation that may be relevant for your business practices. Be sure to review the base delivered algorithms to confirm what is provided.

To Do Management Portal

In this release a new portal and query zone have been provided to help assignment and management of non-completed To Do Entries. This new To Do Management portal provides many options that improve on the functionality of the existing pages for assigning and managing non-completed To Do entries, including To Do Search, To Do List and To Do Supervisor Assignment.

The following points highlight the features of the new To Do Management portal:

- It is provided for both supervisors and non-supervisor To Do users. As with existing To Do pages, a supervisor is determined via security access.

- The query zone requires a To Do Type. Only the To Do Types appropriate for the current user are shown.

- Many filters have been provided to help users to narrow down the list of To Do entries to view based on specific requirements. Besides common filters like the assigned user or role and the priority, the zone also provides the ability to filter by a Sort Key value, by the Message linked to the To Do and by up to five Characteristic Type and Value pairs.

- Instead of provide a date range for the filter, the zone provides a 'days' range. This is because more often users are looking for To Dos that are a specific age or in a range of ages.

- The Characteristic Type filter drop-down first checks to see if the To Do Type configures To Do Characteristics and if so, it only shows those characteristic types. If the To Do type does not have such configuration, the drop-down shows all valid characteristic types for the To Do Entry characteristic entity.

- The zone does not use pagination. It returns to 400 To Do entries using the input filter criteria.

- The zone supports column configuration, allowing each user to choose the columns displayed and the order. Using this technique, users can use the Save Search functionality to save different searches for different To Do Types and different search requirements.

- The search results includes the following:

- Display of the information string of the related object (drill key) of the To Do entry.

- Ability to put the list of results into the Worklist zone.

- Besides the creation date and time, there is also a column for the age of the To Do entry ('days old'), for users that prefer seeing the information in that format.

- Separate columns for the first 5 sort keys (with sort key type / value listed) allowing the user to sort by any of the values.

- A single column showing all the characteristics for the To Do listing each type and value.

- The count of related To Do entries. As with other pages, clicking the link brings the user to the To Do Search

- If comments or a user log exists, the standard icon is visible but clicking the icon displays the information. This is different from other existing To Do query pages, which take the user to the To Do entry maintenance page to view the information.

- Several mass actions are provided. For one or more selected To Do entries, a user can assign, un-assign, complete, update the priority or add a user log entry. Note that the new portal follows existing business rules. For example, if a To Do is assigned to a user, only that user can update its priority.

An upgrade script has been provided that automatically adds security access to the new F1TODOMG (To Do Management) Application Service for any user group that has access to the To Do Search application service (CILQTDQP) for the same access modes. The access modes for the new application service match those in the To Do Search's application service.

- Assign

- Supervisor Assign (Only users with this access mode will be able to search for To Do entries assigned to someone else and will be able to assign To Do entries to someone else).

- Change

- Complete

- Inquire

- Reopen To Do (The 'Unassign' action is controlled by this access mode).

Steps To Enable
This feature is automatically enabled, but the following sections provide useful information for using the To Do Management portal.

Implementation Tips and Considerations
Because characteristics are both filter values and search results values, the product recommends that edge products review related key information that may help your users prioritize or assign To Do entries and use the new To Do pre-creation algorithm plug-in spot on To Do Type to capture relevant key information as characteristics. A note of caution that linking too many characteristics to each To Do can result in a decrease in system performance, which would then reduce your users' efficiency. Carefully consider each characteristic and balance the cost / benefit of each.

In addition, your implementation should consider configuring the valid To Do characteristic types that are relevant for To Do entries of a given To Do Type on the To Do Type > To Do Characteristics tab. This will ensure that the To Do Management's characteristic type filter drop-down only shows the characteristic types relevant for the chosen To Do type.

Role-related Information

It is recommended that your security administrators review the security access for the F1TODOMG application service to ensure that the upgrade script provided appropriate access to the appropriate user groups.

Expand Ability to Add Logs and Enter Comments on To Do

In previous releases, if a user had security for the Complete access mode on the Current To Do dashboard zone, both the Complete and Complete All (to complete related To Do entries also) would be available. In this release an additional access mode for Complete All has been introduced, allowing for implementations to separately secure which users are allowed to complete a group of related To Do entries from the users allowed to complete a single To Do entry being worked on.

Steps To Enable

An upgrade script is provided to give all user groups security for the new Complete All access mode (COA) for the FWLCTDEP (Current To Do Zone) application service if they currently have security for the Complete access mode. Security administrators who would like to restrict access to the new Complete All access mode should review their user groups and update the security accordingly.

External Messages Enhancements

The following sections highlight enhancements to the external message functionality.

Support URI Substitution for WSDL Link for SOAP Services

In this release the system supports a new URI substitution variable for the WSDL URL: F1_BASE_IWS_URI. This will be configured for cloud implementations. For on-premises installation, no configuration is necessary.

Steps To Enable

No steps are required to enable this feature.

Support URI Substitution for External Links to the Application

In this release the system supports a new URI substitution variable for defining the base URI for launching the system from an external link: F1_BASE_WEB_URI. This will be configured for cloud implementations. For on-premises installation, no configuration is necessary. The F1-RetrieveEnvironmentURL (Retrieve Environment URL) business service has been updated accordingly.

Steps To Enable

No steps are required to enable this feature.

Miscellaneous Enhancements

Menu Name Visible in Search Menu Results in Debug Mode
When logging into the system in Debug mode, the name of the parent menu where a menu item is found is displayed in parentheses when using the Search Menu function.

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 v4.4.0.0.0, or is planned for removal.

Items Planned for Future Deprecation
This is a list of functionality / system data that Oracle plans to deprecate in a future release.

Support for Master / Subordinate Services for Web Services Catalog
The Service Catalog Configuration (master configuration) supports defining subordinate servers. This functionality is no longer applicable for the Oracle Integration Cloud and will be removed in a future release.

Miscellaneous System Data
- Environment Reference. This administrative maintenance object was related to ConfigLab and Archiving, which are no longer supported. In a future release, the following will be removed:

  - Migration Plan F1-EnvironmentRef. Note that no base migration request references this plan. Implementations should ensure that no custom migration request references this plan.

  - F1-EnvironmentRefPhysicalBO business object

  - ENV REF maintenance object

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

- The following algorithm types and algorithms provided for the current LDAP import functionality do not include any logic. They will be removed in a future release.

  - Algorithm Type / Algorithm F1-LDAPIMPRT

  - Algorithm Type / Algorithm F1-LDAPPREPR

- The lookup value CHAR_ENTITY_FLG / F1SE (Characteristic Entity / Sync Request Inbound Exception) is not in use and will be removed in a future release.

- The database table F1_IWS_SVC_OPER_L will be removed in a future release.

- The zone F1-MGRREQDSP will be removed in a future release.

Support for HTTP Proxy Functionality

HTTP Proxies are a common technique for firewalling outbound communications within and outside an enterprise.

In past releases, the configuration of a HTTP Proxy was done on individual senders and other connections. This increased the amount of duplication across the implementations with multiple places to update proxy settings. In this release, these settings have been delegated to the JVM level using proxy features at the JVM level rather than individual connections. This will reduce the amount of configuration and maintenance of proxy functionality by allowing implementations to use the inbuilt proxy support from Java directly. This will require additional command line settings to be configured on the online WebLogic Servers and command lines within our configuration for batch.

For more information about the settings, refer to the Java Networking and Proxy documentation

CMA Migration Requests

The migration requests F1-FrameworkAdmin (Framework Admin) and F1-SchemaAdmin (Schema Admin) are no longer recommended and are not going to be updated with new administration / control tables in future releases. The product may deprecate them in a future release.

CMA Import Algorithm

In a future release, the CMA Import algorithm plug-in spot will be deprecated. As an alternative, review any existing algorithms and create appropriate Pre-Compare algorithms.

Business Object Read in F1-MainProc When Pre-Processing Exists

In the original implementation of configuration tools, if a pre-processing script was linked to the business object via options, the main framework maintenance BPA (F1-MainProc) would not perform a Read of the business object (leaving it to the responsibility of the pre-processing script).

In a subsequent release, to solve a UI Hints issue related to child business objects, a business object Read was included in F1-MainProc even if a pre-processing script existed. This solution introduced a problem only visible for specific scenarios and a different fix has been introduced. In the meantime, the business object Read is no longer necessary in F1-MainProc. Since there are many pre-processing scripts that are properly performing the Read of the business object, ideally the business object 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 business object Read was included in F1-MainProc that were coded to not perform a business object read in the pre-processing script. Due to this situation, the business object Read is still performed as part of the processing of F1-MainProc.

The product plans to remove the business object Read from F1-MainProc logic when a pre-processing script exists. Review your custom pre-processing scripts that are linked to your business object options to ensure that it properly performs a Read of your business object.

Known Issues in This Release

The following section lists known issues and bugs not fixed in this release of Oracle Utilities Smart Grid Gateway and the Oracle Utilities Application Framework.

This section includes:

- Known Issues in Oracle Utilities Smart Grid Gateway
- Known Issues in Oracle Utilities Application Framework

Known Issues in Oracle Utilities Smart Grid Gateway

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

Online Help

Bug Number	Description
29012202	Links from the online help to the Application Viewer are not working correctly in this release.

Smart Grid Gateway Adapters

Bug Number	Description
28402596	Issue with filtering measurements and device events when importing measurement and device event data using Oracle Service Bus (OSB) with Smart Grid Gateway adapters. This issue can be fixed by applying patch 27235959 for Oracle Service Bus. To fix the issue: 1. Stop the application server(s) where Oracle Service Bus is installed. 2. Install patch 27235959 on each server where Oracle Service Bus is installed. 3. Restart the application servers.
29042956	**Silver Spring Networks Adapter** The Oracle Service Bus Service Definition URI is incorrectly configured to use XAI.
29043364	**MV90 Adapter for Itron** Notification messages for the MV90 Adapter for Itron has an incorrect date/time format definition.

Known Issues in Oracle Utilities Application Framework

The following are the known issues in this version of Oracle Utilities Application Framework which may affect Oracle Utilities Smart Grid Gateway at the time of release:

- The display of the characteristic value on the **To Do Management** portal has inconsistent behavior for Foreign Key Value characteristics that do not have a

search zone. Characteristic values should be displayed like Adhoc Value characteristics. When searching by this characteristic alone, the characteristic value displays properly.

- The Application Viewer is not supported on the Chrome browser.

- Cube Type access should be controlled by the application service associated with the Cube type's "sourcing data" zone. Currently, users that have access to Cube View will see all Cube Types.

- When navigating to a portal with data in context, the search does not execute if the target portal is configured with a query zone.

- Firefox Error dialogs do not open large enough for you to view full the error message.