Oracle Utilities Market Settlements Management
Release Notes
Release 2.3.0.0
F12117-01

December 2018
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These release notes provide an overview of the new functionality and known issues in Oracle Utilities Market Settlements Management Release 2.3.0.0.

**Audience**

This Release Notes is intended for anyone installing or using Oracle Utilities Market Settlements Management V2.3.0.0.

**Related Documents**

The following documentation is included with this release.

**Installation, Configuration, and Release Notes**
- Oracle Utilities Market Settlements Management Release Notes
- Oracle Utilities Market Settlements Management Quick Install Guide
- Oracle Utilities Market Settlements Management Installation Guide
- Oracle Utilities Market Settlements Management Database Administrator's Guide

**User Guides**
- Oracle Utilities Market Settlements Management Administrative User Guide

**Supplemental Documents**
- Oracle Utilities Market Settlements Management Server Administration Guide
Conventions

The following text conventions are used in this document:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>boldface</td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td>italic</td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td>monospace</td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
These release notes contain the following sections:

- About This Release
- Relationship Between 2.3.0.0.0 and Prior Versions
- Supported Platforms Notice
- Database Changes
- Demo Data Information
- User Configuration
- Enhancements
- Oracle Utilities Application Framework V4.4.0.0 Release Notes
- Known Issues in This Release
About This Release

This section contains general information about Oracle Utilities Market Settlements Management V2.3.0.0. The Oracle Utilities Market Settlements Management release includes the following components:

- Oracle Utilities Application Framework V4.4.0.0
- Oracle Utilities Market Settlements Management V2.3.0.0

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

Version 2.3.0.0.0 supports the following upgrade paths:

- If you are installing Oracle Utilities Market Settlements Management for the first time, you must install V2.3.0.0.0, available on the Oracle Software Delivery Cloud.
- If you have Oracle Utilities Market Settlements Management V2.2.0.3 installed you can upgrade to V2.3.0.0.0 directly.

Supported Platforms Notice

Refer to the Supported Platforms section of the Oracle Utilities Market Settlements Management Quick Install Guide included in this release for an updated list of supported platforms.

Database Changes


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. Refer to the Oracle Utilities Market Settlements Management Database Administrator's Guide for more information about installing the demo database, or contact Oracle Support.
User Configuration

Oracle Utilities Market Settlements Management shares its application environment with other Oracle Utilities meter solution products, including Oracle Utilities Meter Data Management and Oracle Utilities Smart Grid Gateway. 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 Market Settlements Management is available, application users should be assigned to the following set of user groups:

- Meter Stack Common Services
- Meter Stack Common Batch Services*
- Settlement Services
- Settlement Batch Services*

*These user groups should be restricted to only those users who will be executing batch processing.

Refer to the Defining Users section in the Oracle Utilities Application Framework Administrative User’s Guide for more information about setting up users.

Enhancements

This section describes new features and functionality included in this release of Oracle Utilities Market Settlements Management, including:

- Updated User Interface
- Divisions
- Usage Subscription Quantities
- Settlement Data Snapshots
- Measuring Component Set Calculation Settlement Calculation Rule
- Formula-Based Market Product Type

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 1-6 for more information.

Divisions

Divisions represent different operating companies within a large conglomerate of utilities. Divisions can have one or more effective-dated characteristics defined.

Divisions can be specified on several objects and entities in the system, including:

- Service Point
Usage Subscription Quantities

Usage Subscription Quantities are a new measured value that can be stored at the usage subscription level. These are intended to store quantities that do not change frequently enough to be captured as measurement data. A sample use case for these quantities is storing the peak load contribution a given usage subscription had in relation to the peak load of a deregulated market.

Settlement Data Snapshots

Settlement data snapshots capture data as of a specific point in time for use in aggregation and settlement calculations. For instance, data snapshots can capture data such as:

- The state of a settlement account (a Settlement Item) as of the last time something about the account changed
- The state of a settlement account as of the last time the account was billed
- Metered measurement data used for initial settlement
- Billed measurement data used for final settlement

There are two general categories of settlement data snapshots:

- **Attribute data snapshots** are used to capture settlement account data as of a specific point in time, such as the last time an attribute on the account changed or the last time it was billed. Attribute data snapshots are created via a data synchronization process from a customer information system (such as Oracle Utilities Customer Care and Billing).

- **Measurement data snapshots** are used to capture interval and/or scalar measurement data for settlement accounts as of a specific point in time, such as the when the data was used for initial settlement or when the account was billed. Measurement data snapshots are created via a data synchronization process from a meter data management or customer information system (such as Oracle Utilities Meter Data Management or Oracle Utilities Customer Care and Billing).
Measuring Component Set Calculation Settlement Calculation Rule

This release introduces a new Measuring Component Set Calculation settlement calculation rule that can be used to perform settlement UFE distributions efficiently at a much more granular level than doing so using the Array Math settlement calculation rule. This rule executes a batch program (D1-MCSCA, defined as a parameter on the Execute MC Set Calculation-Apply Rule algorithm), which in turn executes the Perform MC Set Calculation algorithm to perform calculations for each aggregation measuring component within the measuring component sets configured on the rule. The rule configuration includes definition of variables and the equation used for UFE calculations. Variables can be based on specified measuring component sets, aggregation measuring components, or calculated quantities.

This rule is used with Bulk Settlement Calculation Groups.

Formula-Based Market Product Type

This release introduces a formula-based Market Product Type that can be used to define market product types with complex award allocation as well as allocations to multiple contracts per award. This business object provides the ability to configure complex conditional calculations that take in both interval and scalar variables.

Details used in performing formula-based calculations for market products of this type include:

- Algorithms to be executed prior to performing market award calculations. These can include validation algorithms used to ensure the data being used by the calculations is valid and algorithms that retrieve, calculate, and store values used later in the calculation.
- Input variables (including Fixed Variables, Award Adhoc Characteristics, Factor Numbers, and Calculated Quantities) and Input Vectors (Fixed Vector Variables, Calculated Quantities, and Factor Profiles) that will be used in the calculations performed for products of this type.
- One or more calculations, based on input variables and simple or conditional formulas.
- How the results of the calculations are saved and used in later processing, including saving results to calculated quantities and/or characteristics on the settlement transaction that initiated the market product calculation.
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.

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**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:
To Do Enhancements

• 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 FITODOMG (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 FITODOMG 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, 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 firewallsing 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 Market Settlements Management and the Oracle Utilities Application Framework.

This section includes:

- Known Issues in Oracle Utilities Market Settlements Management
- Known Issues in Oracle Utilities Application Framework

Known Issues in Oracle Utilities Market Settlements Management

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

Online Help

<table>
<thead>
<tr>
<th>Bug Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>29012202</td>
<td>Links from the online help to the Application Viewer are not working correctly in this release.</td>
</tr>
</tbody>
</table>

Contacts

<table>
<thead>
<tr>
<th>Bug Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>29054356</td>
<td>Issue when creating contacts using the user interface. System displays the following error message: &quot;A value for option type Portal Navigation Option must be specified on the Business Object.&quot;</td>
</tr>
</tbody>
</table>

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 Market Settlements Management 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.