# **Oracle Utilities Meter Solution Cloud Service**

Release Notes Release 19B **F20150-01** 

June 2019



Oracle Utilities Meter Solution Cloud Service Release 19B Release Notes

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# Chapter 1 Release Notes

These release notes contain the following sections:

- About This Release
- Oracle Utilities Meter Solution Cloud Service Enhancements
- Oracle Utilities Application Framework v4.4.0.1 Release Notes

# **About This Release**

This section contains general information about Oracle Utilities Meter Solution Cloud Service Release 19B.

Oracle Utilities Meter Solution Cloud Service includes the following Oracle Utilities applications:

- Oracle Utilities Meter Data Management v2.3.0.1.0
- Oracle Utilities Smart Grid Gateway v2.3.0.1.0
- Oracle Utilities Smart Grid Gateway Adapter for Echelon v2.3.0.1.0
- Oracle Utilities Smart Grid Gateway Adapter for Itron OpenWay v2.3.0.1.0
- Oracle Utilities Smart Grid Gateway Adapter for Landis+Gyr v2.3.0.1.0
- Oracle Utilities Smart Grid Gateway Adapter for Sensus RNI v2.3.0.1.0
- Oracle Utilities Smart Grid Gateway Adapter for Silver Spring Networks v2.3.0.1.0
- Oracle Utilities Smart Grid Gateway MV-90 Adapter for Itron v2.3.0.1.0
- Oracle Utilities Service Order Management v2.3.0.1.0
- Oracle Utilities Cloud Service Foundation v19B
- Oracle Utilities Customer Care and Billing to Meter Data Management v12.1.0
- Oracle Utilities Integration for Device Operations v12.1.0
- Oracle BI Publisher

## Oracle Utilities Meter Solution Cloud Service Enhancements

This section provides descriptions of enhancements in this release of Oracle Utilities Meter Solution Cloud Service, including:

- Adapter Development Kit Payload Processing
- Silver Spring Networks Adapter On-Demand Read Command

#### **Adapter Development Kit Payload Processing**

The Oracle Utilities Smart Grid Gateway Adapter Development Kit has been enhanced to support payload processing of custom and non-standard usage and device event payloads. See **Adapter Development Kit Custom Payload Processing** in the *Oracle Utilities Customer To Meter Administrative User Guide* for more information.

#### Silver Spring Networks Adapter On-Demand Read Command

The On-Demand Read command for the Oracle Utilities Smart Grid Gateway Silver Spring Networks Adapter is supported in this release. See **Smart Meter Commands** in the *Oracle Utilities Customer To Meter Administrative User Guide* for more information.

# Oracle Utilities Application Framework v4.4.0.1 Release Notes

This section describes enhancements, system data details and deprecation notices in Oracle Utilities Application Framework v4.4.0.1.0 including:

- User Interface Enhancements
- Market Transaction Management
- Application Security Enhancements
- To Do Enhancements
- Integration Enhancements
- Scripting Enhancements
- Miscellaneous Enhancements
- Oracle Utilities Application Framework Deprecation Notices

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

#### **User Interface Enhancements**

#### **Error in Business Object Maintenance Dialogue Scrolls**

When making change to a business object driven record using the pop-up maintenance dialogue any error message displayed will 'float' or scroll with the page.

Previously, error messages on a pop-up maintenance dialogue were shown at the top of the dialogue. However, if the element in error was located lower on the page and was marked as part of the error, the user needed to scroll to view the error. In this release, the dialogue has been enhanced so that the error message is always visible until the user clicks **Save** or **Cancel**.

#### Steps To Enable

No steps are required to enable this feature.

#### **Query Filter Area Enhancement**

The query data explorer filter area has been enhanced to automatically collapse when showing results to allow for more results to be visible.

In this release, we have introduced functionality in query data explorer zones. If the query results in more than two records, the filter area will automatically collapse to provide more space for the results. An **Expand Filters** button will appear to allow the user to expand and view the filters. When the filters are expanded, a **Collapse Filters** button is visible.

This functionality applies to saved searches as well.

#### Steps To Enable

No steps are required to enable this feature.

#### **Timeline Zone Redesign**

The Timeline zone has been redeveloped to improve the overall look and feel.

The redesign has the following main features:

- The calendar controls have been repositioned to be more in line with the new standards
- Events now appear as a simple circle enclosing the day in the month that the event occurred. Icons are no longer used.
- The information formerly displayed separately as hover text or within a detail section has now been incorporated into a single pop-up window that appears when the user hovers over the event.
- The zone now follows the updated color standards. Note that as part of this it
  means that the zone no longer supports different colors for background color,
  text color or icon overrides as in previous releases.
- The underlying structure has been simplified to enhance rendering and accessibility

#### Steps To Enable

No steps are required to enable this feature.

#### **Market Transaction Management**

In this release support has been provided for market transaction management Several objects are provided to support market transaction management.

- Market Message Type: This object is used to define the different types of market messages, both inbound and outbound and to define the appropriate market message Business Object to use when creating objects of this type.
- Inbound Market Message: This object captures the instance of a market message received from an external source.
- Outbound Market Message: This object captures the instance of a market message that will initiate a message to an external source.
- Market Process Type: This object is used to define configuration related to processes that may be initiated to support steps that should be execute to support an inbound or an outbound market message. It defines the market process Business Object to use when creating market processes of this type. It may also define one or more market process event business objects to initiate events that are generated to support steps within the market process.
- Market Process: This object captures the instance of a market process that may be created to carry out business logic related to a specific inbound or an outbound market message.
- Market Process Event: This object is used to orchestrate individual events that may occur to support steps in a given market process.
- Market Configuration: This object may be used to capture configuration needed to support market transactions. Each type of configuration should use a Business Object to define what information needs to be captured. Each type of

configuration may define up to five key fields that may be used to uniquely identify an individual configuration instance.

Note that the Framework supplies basic functionality for each maintenance object. Individual applications may supply more functionality related to different business processes that are supported out of the box for market transaction management.

Refer to the **Market Transaction Management** chapter in the *Oracle Utilities Application* Framework Administrative User Guide as well as related sections in individual application Administrative User Guides for details about what is supported in each product.

Note that the following objects are enabled for Information Lifecycle Management (ILM). Standard ILM crawler batch controls have been provided for the maintenance objects and the maintenance objects are configured with the standard ILM eligibility algorithms.

- Inbound Market Message
- Outbound Market Message
- Market Process
- Market Process Event
- Are steps required to enable? (required)

#### **Steps To Enable**

Security administrative users must provide access to appropriate user groups to several new application services listed below.

Application Service	Description	Access Mode
F1-IMCRL	ILM Crawler - Inbound Market Message	Execute
F1INMM	Inbound Market Message Portal	Inquire
F1-MIMMN	Inbound Market Message Monitor	Execute
F1-MKCRL	ILM Crawler - Market Process	Execute
F1-MKMSO	Outbound Market Message Monitor	Execute
F1-MKPRP	Market Process Monitor	Execute
F1MKTCFG	Market Configuration Portal	Inquire
F1-MKTCFG	Market Configuration MO	Add, Change, Delete, Inquire
F1MKTCFS	Market Configuration Query Portal	Inquire
F1MKTMSG	Market Message Query Portal	Inquire
F1-MKTMSGIN	Inbound Market Message MO	Add, Change, Delete, Inquire
F1-MKTMSGOUT	Outbound Market Message MO	Add, Change, Delete, Inquire
F1-MKTMSGTYP	Market Message Type MO	Add, Change, Delete, Inquire
F1MKTPEV	Market Process Event Portal	Inquire
F1MKTPR	Market Process Portal	Inquire
F1-MKTPRCEVT	Market Process Event MO	Add, Change, Delete, Inquire

F1-MKTPRCTYP	Market Process Type MO	Add, Change, Delete, Inquire
F1-MKTPROC	Market Process MO	Add, Change, Delete, Inquire
F1MKTPTY	Market Process Type Portal	Inquire
F1MMTYPE	Market Message Type Portal	Inquire
F1-MPECL	ILM Crawler - Market Process Event	Execute
F1-MPEVRM	Market Process Event Monitor	Execute
F1-OMCRL	ILM Crawler - Outbound Market Message	Execute
F1OUTMM	Outbound Market Message Portal	Inquire
F1PRCQRY	Market Process Query Portal	Inquire

#### **Application Security Enhancements**

#### **User Group Services Management Portal**

A new portal is provided to manage application service links to user groups.

In this release, we have introduced a new portal **User Group Services Management** portal. This portal provides a list of all user groups. When a security user broadcasts a user group, additional zones appear.

- Application Services Linked: This zone shows the list of application services
  and access modes currently linked to the user group. A user may remove one or
  more links using this zone.
- Application Services Not Linked: This zone shows the application services and access modes that are not currently linked to this user group. A user may add one or more application services/access modes using this zone.

Both zones include filters allowing a user to narrow the results to a subset of records.

#### **Steps To Enable**

Security administrative users must provide access to appropriate user groups to the application service used by this new portal.

#### To Do Enhancements

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

#### Ability to Work On To Do from To Do Management

The **To Do Management** portal now has a **Work** button for each entry in the search results, allowing a user to drill in and work on the To Do entry.

In this release, the **To Do Management** portal (introduced in the previous release) has been enhanced to include a **Work** button for each row in the results. Clicking this button causes the To Do entry to be the user's "current To Do", resulting in the following functionality.

- The user is taken to the page associated with the related object (the "drill key"), or if configured, it launches the BPA script associated with the To Do type.
- The **Current To Do** dashboard zone is populated with this To Do entry. This zone provides a link to view the To Do entry record and provides a button to Complete the To Do. In addition if the To Do entry has related To Do entries, the user may click a link to view the related To Do entries and provides a button to Complete All of the To Do entries.

This new column includes the **Worklist** icon, allowing a user to put all the results in the dashboard's **Worklist** zone. Once records are in the **Worklist** zone, clicking another entry triggers all the code described above. The new entry becomes the "current To Do"; the user is brought to the appropriate page or an associated BPA is launched; and the **Current To Do** dashboard zone is updated accordingly.

#### Steps To Enable

No steps are required to enable this feature.

#### **Integration Enhancements**

#### More Detail in API Specification for REST Services

In this release, the API Specification generated for REST Services has been enhanced to show more useful, descriptive information.

The API Specification now displays the Inbound REST Web Service' long description at the top of the specification.

In addition, for each element in the schema of the business object, business service or service script referenced by each operation, the API specification shows information based on the element's related Field, if populated. It shows the field's label, field type and field size. In addition, if the field is a lookup, the valid values of the lookup are also displayed.

#### Steps To Enable

No steps are required to enable this feature.

#### **Scripting Enhancements**

#### Support for Marking an Element in a List in Error

Syntax is provided in XPath scripting for marking an element within a list in the terminate with error statement.

The terminate with error supports 'element=' to refer to the XPath of the element in error. However, previously there was no way to support indicating a list occurrence if the element in question was in a list. In this release, support is provided by moving the proper XPath reference to a variable and then referencing the variable in the element= syntax.

#### Steps To Enable

In order to correctly reference an element within a list as the element to mark for an error, script writers must update any script to configure the information.

- The 'for' loop should maintain a count of the list occurrence.
- When an error is detected, a move "concat" statement should be used to build the correct XPath syntax for the list occurrence / element to reference, populating a variable.
- The terminate with error statement should use the variable in the element= attribute.

#### Example:

```
move "0" to $count;
default $elementReference;
for ($list in "parm/hard/newBusinessObject/listName")
move "1 + xs:integer($count)" to $count;

if //** check some condition for elementName

    move "concat('list[',$count,']/elementName')" to
$elementReference;
    terminate with error (11000, 11000
element=$elementReference);
end-if;
end-for;
```

#### Ability to Mark Field in Error for Groovy Script

A new method is provided in Groovy scripting to indicate a field to mark when issuing an error.

In this release, the method addErrorWithPath has been added to support issuing an error from a Groovy script and providing a reference to the field in error so that the user interface can correctly mark the field. This syntax supports referencing a field within a list as well.

#### Steps To Enable

In order to correctly reference an element within a list as the element to mark for an error, script writers must update any Groovy script to use the new method and configure the field to mark. The syntax is documented in the Javadocs for the method.

#### Miscellaneous Enhancements

#### Ability to Manually Transition Object Erasure

Users may transition an object erasure record from Pending to Discarded or Erased and from Discarded back to Pending.

Previously a user could only edit an object erasure record and adjust its erasure date. In this release, the user may now transition an object erasure record from Pending to Discarded or Erased and from Discarded back to Pending. As per standard processing, the status transitions may be controlled by application security.

#### Steps To Enable

No steps are required to enable this feature.

#### Support a Summary Panel for a Process Flow

A process flow designer may now provide a high level summary panel for a finalized process flow.

When applicable, a process flow may be configured to present the user with a high level summary of the information and events associated with a closed process flow. The summary panel is defined on the process flow type and is optional.

In addition, log records associated with a process flow record are no longer displayed as part of the query portal. They are displayed on a standard log tab on the process flow portal.

#### **Steps To Enable**

No steps are required to enable this feature.

#### **New Batch Control Template for Monitor Batch Controls**

A new batch control template is provided.

The new template is provided as an easy starting point for implementers to create new monitor batch controls and include the appropriate parameters.

#### **Steps To Enable**

No steps are required to enable this feature.

#### **Application Viewer Supported in Chrome Browser**

The application viewer is now supported in the Chrome browser.

Note that this was also hot fixed to the 4.4.0.0.0 code line. Refer to bug 29648052.

#### Steps To Enable

No steps are required to enable this feature.

#### Status Added to Installed Products Collection

A product status has been added to the **Installation Options - Installed Products** collection.

In this release, a new **Product Status** field has been introduced to the list of installed products in the **Installation Options** portal. It allows the installation step of a multiproduct installation to mark one or more products in the 'stack' as inactive, meaning that certain functionality related to that product is 'turned off'.

#### **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 v4.3.0.5, 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.

#### **Append Setting In Pagination**

There are several known issues with the functionality of the 'append' option in pagination such that it is not recommended to use this pagination setting. This functionality will be deprecated 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.

#### Selected Functionality of the Batch Run Statistics Portal

The **Batch Run Statistics** portal provides some additional information abut batch runs. However, some of the functionality provided on this page is related to capturing additional information from an external tool. This information is stored in a Fact record.

The functionality related to capturing additional information will no longer be supported in a future release. This information will still be available to existing clients, but the functionality will no longer be maintained.

#### 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 metadata related to the legacy LDAP import pages will be removed in a future release: Services CILTLDIP, CILTLDIL, CILTLDIS, Application Service: CILTLDIP
- 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 zone F1-MGRREQDSP will be removed in a future release.

#### **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.