

Oracle Utilities Customer Cloud Service

Release Notes

Release 19B

F20148-01

June 2019

Oracle Utilities Customer Cloud Service Release 19B Release Notes

Copyright © 2000, 2019 Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

Chapter 1

Release Notes	1-1
About This Release.....	1-2
Oracle Utilities Customer To Meter Enhancements.....	1-3
Limiting Service Point Characteristics by Service Point Type	1-3
Configurable Letter Print Extracts	1-3
Letter-Oriented Customer Contact Enhancement	1-4
Enhanced Pay Plan Processing to Optionally Consider Payments Across Different Debt Classes	1-4
Enhanced Payment Arrangement Search Results Grid with Service Agreement Related Dates	1-5
Tracking Written Off Debt.....	1-5
Creation of Customer Contacts for Field Remarks from Field Related Activities	1-5
Creation of Adjustments on Completion of Field and Command Request Related Activities	1-5
Enable Mapping of Field Activity Types to Non-Orchestrator Activity Types.....	1-6
Enhanced Sync Request Related Business Objects to Support Initial Loading of Specific Master Data	1-6
Enabling Dynamic Options on Usage Subscriptions to be Used to Override TOU Periods.....	1-6
Smart Grid Gateway Enhancements.....	1-7
Planned Deprecation.....	1-7
C1-RateApplication Inbound Web Service	1-7
User - Tender Source Maintenance Object.....	1-7
Migration Plans.....	1-8
Oracle Utilities Application Framework v4.4.0.1 Release Notes	1-9
User Interface Enhancements.....	1-9
Market Transaction Management.....	1-10
Application Security Enhancements	1-12
To Do Enhancements	1-12
Integration Enhancements.....	1-13
Scripting Enhancements	1-13
Miscellaneous Enhancements	1-14
Oracle Utilities Application Framework Deprecation Notices.....	1-16

Chapter 1

Release Notes

These release notes contain the following sections:

- [About This Release](#)
- [Oracle Utilities Customer To Meter Enhancements](#)
- [Oracle Utilities Application Framework v4.4.0.1 Release Notes](#)

About This Release

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

Oracle Utilities Customer Cloud Service includes the following Oracle Utilities applications:

- Oracle Utilities Customer To Meter v2.7.0.2
- Oracle Utilities Cloud Service Foundation v19B
- Oracle BI Publisher

Oracle Utilities Customer To Meter Enhancements

This section provides descriptions of enhancements in Oracle Utilities Customer To Meter introduced since the previous release of Oracle Utilities Customer Cloud Service, including:

- [Limiting Service Point Characteristics by Service Point Type](#)
- [Configurable Letter Print Extracts](#)
- [Letter-Oriented Customer Contact Enhancement](#)
- [Enhanced Pay Plan Processing to Optionally Consider Payments Across Different Debt Classes](#)
- [Enhanced Payment Arrangement Search Results Grid with Service Agreement Related Dates](#)
- [Tracking Written Off Debt](#)
- [Creation of Customer Contacts for Field Remarks from Field Related Activities](#)
- [Creation of Adjustments on Completion of Field and Command Request Related Activities](#)
- [Enable Mapping of Field Activity Types to Non-Orchestrator Activity Types](#)
- [Enhanced Sync Request Related Business Objects to Support Initial Loading of Specific Master Data](#)
- [Enabling Dynamic Options on Usage Subscriptions to be Used to Override TOU Periods](#)
- [Smart Grid Gateway Enhancements](#)

Limiting Service Point Characteristics by Service Point Type

The types of characteristics allowed on service points is now limited based on characteristic types defined for the service point's types. The **Service Point Type** portal now includes a **Valid SP Characteristic Types** zone where users can define the characteristic types allowed on service points of that type. See **Understanding Service Point Types** in the *Oracle Utilities Customer To Meter Administrative User Guide* for more information.

Configurable Letter Print Extracts

Customer contacts that trigger letters reference a customer contact type that, in turn, references a letter template.

The LTRPRT (Letter Extract) background process (batch control) uses the extract algorithm on a letter template and is responsible for extracting information to be merged onto letters. These algorithms create the "flat file records" that are passed to a letter print software.

In this release, a new *CI-LTPEX (Letter Print Extract)* batch control is provided that produces letter extract files based on the letter extract records configured on letter templates. Each letter template may be configured with a different set of record types. Some record types have configuration options such as which characteristic types to extract or how to identify the object to extract. The layout associated with a record type

can be viewed on the **Letter Template Extract Record List** zone on the letter template portal.

Refer to the **Printing Letters** section in the *Oracle Utilities Customer To Meter Business User Guide* for more information.

Letter-Oriented Customer Contact Enhancement

In this release, letter-oriented customer contacts have been enhanced to include a **Print Letter** checkbox if a letter has not yet been printed. This checkbox enables an implementation to indicate whether a letter should be printed or not (e.g., if there was an error discovered in initially attempting to print a specific letter or printing should be postponed).

In addition to the above, the **Reprint Letter** checkbox is only displayed if a letter for a customer contact has already been printed.

Enhanced Pay Plan Processing to Optionally Consider Payments Across Different Debt Classes

Pay Plans are created and belong to a specific Pay Plan Type. A Pay Plan Type defines the Debt Class whose debt is insulated by the pay plan for the pay plan's related account's service agreements.

The *PPM (Pay Plan Monitor)* background process (batch control) is responsible for monitoring all active pay plans. It looks for payments made by the pay plan's payor and distributed against the service agreements (SAs) for the pay plan's account in the same debt class as the pay plan's debt class. It uses these payments to logically offset the pay plan's scheduled payments and determines if a pay plan has been kept, broken or remains active. There are situations where a combination of multiple debt classes, third-party pay plans, and payment distribution priority can result in pay plans being marked as broken inadvertently.

In this release, the *Pay Plan Monitor (PPM)* background process (batch control) has been enhanced to include batch parameters to instruct the logic to ignore the debt class where payments were applied while querying payments to determine if scheduled payments were satisfied.

The algorithm plugged in on the *Override Arrears Due to Pay Plan* system event, if configured, on a debt class temporarily overrides a customer's arrears using a pay plan's scheduled payments when the system looks at an account's debt from a credit & collections perspective.

In this release, the base package supplied *PP OVRD ARS (Pay Plan Override Arrears)* algorithm type has also been enhanced to allow an implementation to specify whether or not to ignore Debt Classes when querying payments for a pay plan. The purpose of this is to prevent collections from being initiated for a service agreement when payment has been made as per a pay plan's schedule but the payment has been distributed to a service agreement or service agreements in a different debt class to the pay plan's debt class.

Enhanced Payment Arrangement Search Results Grid with Service Agreement Related Dates

In this release, the Payment Arrangement Search page has been enhanced to include the service agreement's Start Date and End Date (if applicable) to the sort order of payment arrangements in the results grid.

Tracking Written Off Debt

In Oracle Utilities Customer to Meter, debt is written off by transferring uncollectable debt from a service agreement to one or more write off service agreements linked to the same account.

In previous releases, the adjustment created to write off debt by transferring funds from a service agreement with uncollectable debt to a write off service agreement did not capture the original source of debt (i.e., the distribution code). This made it hard to analyse the debt being written off for analytical and reporting purposes.

In this release, the write off processing has been enhanced to optionally capture the original source of debt on the adjustment used to transfer funds to a write off service agreement.

Refer to the **SA Type – Detail** section in the *Oracle Utilities Customer To Meter Administrative User Guide* for more information on enabling the logic to capture the original source of debt.

Creation of Customer Contacts for Field Remarks from Field Related Activities

In this release, a new algorithm type *X1-CRCUSTCN (Create Customer Contact in C2MO)* is provided that contains logic to create a customer contact linked to the main customer associated with a field related activity when the activity is completed with a given remark type.

Algorithms based on the above algorithm type may be leveraged on the *D1-CustomerContact (Notify Requester of Customer Contact)* completion event business object.

Creation of Adjustments on Completion of Field and Command Request Related Activities

In this release, *Field Activity* and *Command Request* related activity types have been enhanced to enable an adjustment to be created when the required work has been completed.

On the *Field Activity* and *Command Request* related activity types, the **Activity Adjustment Type List** zone allows an implementation to configure the types of Adjustments to be created.

The *Field Activity* and *Command Request* related activity types business objects initiate a levy adjustment related completion event that creates the required adjustment(s) when the work for an activity has been completed.

Enable Mapping of Field Activity Types to Non-Orchestrator Activity Types

In severance processes, a Disconnect Warning field activity can be configured to be created by severance events. This type of field activity does not change the status of the service point or installed device.

In this release, the *C2M Mapping Field Values Extendable Lookup* has been enhanced to additionally enable mapping to occur between Field Activity (FA) Types and non-orchestrator related activity types.

Enhanced Sync Request Related Business Objects to Support Initial Loading of Specific Master Data

In Oracle Utilities Customer to Meter, specific master data is stored and kept synchronized across two or more application components.

In this release, specific Sync Request related business objects have been enhanced to support data conversion related activities for the initial loading of specific master data from one application component to another application component.

The following initial load master data flows may be implemented by leveraging the indicated Sync Request related business objects:

- Service Point records from the Oracle Utilities Customer Care and Billing application component to Service Point records in the Oracle Utilities Meter Data Management application component: C1-MDM2SPSyncRequest (MDM2 SP Sync Request) and D1-InitialSyncRequestSP (Service Point Initial Sync Request)
- Service Point records from the Oracle Utilities Meter Data Management application component to Asset Location (Node) records in the Oracle Utilities Operational Device Management application component: D1-ODMSPSyncRequest (ODM SP Sync Request) and W1-InitialSyncRequestLocation (Location Initial Sync Request)
- Contact records from the Oracle Utilities Meter Data Management application component to Contact records in the Oracle Utilities Operational Device Management application component: D1-ODMContactSyncRequest (ODM Contact Sync Request) and W1-InitialSyncRequestContact (Contact Initial Sync Request (W1))
- Service Agreement records from the Oracle Utilities Customer Care and Billing application component to Usage Subscription records in the Oracle Utilities Meter Data Management application component: D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)

Enabling Dynamic Options on Usage Subscriptions to be Used to Override TOU Periods

There are circumstances and conditions during which the rules for creating Time of Use (TOU) map data might need to be calculated differently than according to the utility's standard rules. Examples of this might include critical peak periods, curtailment requests or other demand response events. During these types of events, the TOU rules defined for a TOU map may be overridden.

Dynamic Options specify terms that override how usage is normally calculated, such as a critical peak period that affects the Time of Use (TOU) mapping of interval consumption. These dynamic options are set when a customer signs up for a service or any time after the service has started and these options are recorded in their service agreement as contract options which eventually get synchronized to the usage subscription.

In this release, enhancements have been made to the usage calculation rule business objects that calculate usage using TOU map data to additionally take into account the dynamic options defined on usage subscriptions.

Smart Grid Gateway Enhancements

The following are enhancements add to Oracle Utilities Smart Grid Gateway adapters in this release:

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.

Planned Deprecation

The following features, functions, and data are planned to be deprecated in a future release.

C1-RateApplication Inbound Web Service

Inbound Web Service C1-RateApplication was inadvertently release in a prior version and has been deprecated .For upgrading customers the owner flag has been set to CM. If your organization has not used this in conjunction with any customization, we recommend you delete the Inbound Web Service.

User - Tender Source Maintenance Object

In a previous release, the functionality contained in the User Tender Source (C1-USR TSRCE) maintenance object was replaced with the User - Miscellaneous maintenance object. The User Tender Source and related objects will be deprecated in a future release.

Migration Plans

In a previous release, "self contained" migration plans were introduced to include additional subordinate instructions than the other migration plans that exist for the same object. In a future release the standard migration plan will be updated to include the additional instructions added to the self-contained migration plans, Since these will be redundant, the self-contained migration plans will be deprecated.

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 orchestrate related inbound and outbound market messages. 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 a instance of a market process that carries out business logic for related inbound and outbound market messages.
- **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 implementations and applications may extend this functionality through business objects designed for specific market transaction management business processes.

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 multi-product 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 about 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.