Oracle Utilities Customer Cloud Service

Release Notes

Release 19A

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Oracle Utilities Customer Cloud Service Release 19A Release Notes

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Chapter 1

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Release Notes

These release notes contain the following sections:

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About This Release

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

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

- Oracle Utilities Customer To Meter v2.7.0.1
- Oracle Utilities Cloud Service Foundation v19A
- 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:

- Updated User Interface
- Enhanced Duplicate Person Control
- Configurable Date Entry Option for Order and Start/Stop Date
- Person Name Format Standardization Override
- Enabling Additional Configuration of Address Fields
- Payment Arrangement Requests
- Payment Arrangements Control Central Portal
- Enhanced Support for Third Party Payment Processing
- Divisions
- Usage Subscription Quantities

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 in the Oracle Utilities Application Framework v4.4.0.0 Release Notes section for further information.

Enhanced Duplicate Person Control

Duplicate person validation has been moved into an algorithm. This has been implemented using a business object validation algorithm on a new person business object. The person maintenance object has been updated to include a determine business object algorithm. For upgrading customers, if your implementation is already using a determine business object algorithm on the person maintenance object, you will need to merge your custom functionality with the base logic. It is recommended that your algorithm have a higher sequence than the delivered algorithm and that your business object includes the validation algorithm delivered on the supplied business object.

The delivered validation algorithm has an option to present a warning, which is the existing behavior, or an error when a duplicate is encountered. As delivered, the algorithm will present a warning.

Identifier type has been enhanced to specify which identifier types should be validated for duplicates. For upgrading customers, existing values have been set to validate duplicates.

Configurable Date Entry Option for Order and Start/Stop Date

In a previous release, users could populate the following date related fields on the Start / Stop and Order transactions either manually or using the date picker:

- Start / Stop transaction
  - Start Date
  - Stop Date
- Order transaction
  - Start Date

In this release, a new **Disable Manual Date Entry Feature** configuration option on the **Customer Information Options** feature type enables an implementation to specify if users are required to only use the date picker to enter dates into the above fields.

Person Name Format Standardization Override

In a previous release, the **Person Name Validation** system event plug-in spot, on Installation Options – Framework, was renamed to Person Name Format. The plug-in spot was also enhanced to enable implementations to specify more than one algorithm for validating and formatting person names. In addition to this, the existing algorithm type, NMFM-VALFMT (Person Name Format), was converted and enhanced to groovy scripting with additional capabilities.

In this release, a new optional **Do Not Format** checkbox has been included against **Person Names** on the Person transaction and Order transaction. The setting of this checkbox may be used by algorithms plugged in the **Installation - Person Name Format** plug-in spot to determine if formatting of a person's name should be bypassed or not. The checkbox is enabled by a new **Enable Person Name Format Bypass** feature configuration option on the **Customer Information Options** Feature Type.

In addition to the above, the existing algorithm type, NMFM-VALFMT (Person Name Format), has been further enhanced to take into account the new Do Not Format checkbox setting. It skips the formatting logic, not the validation logic, for a person's name and sets an output switch that tells the system to skip calling subsequent person name format algorithms configured in the Installation - Person Name Format plug-in spot.

Enabling Additional Configuration of Address Fields

In a previous release of Oracle Utilities Application Framework, the **Country** administration menu item was enhanced to enable implementations to use new drop-down values of Optional and Not Allowed when indicating if a particular address component was to be enabled instead of checkboxes that were previously used.

In this release, implementations can configure if an enabled address component is Optional, Not Allowed, or Required. The system pages that store addresses have been updated to enforce the configuration setting.

Payment Arrangement Requests

A payment arrangement is an agreement with a customer to payoff severely overdue debt in installments. Bills sent to customers with payment arrangements contain charges for both their current services and their payment arrangement installment amount.

In this release, a new Payment Arrangement Request feature has been introduced and may be used by implementations to manage the process of starting a payment arrangement. It is a step-by-step process that can include:

- Checking an account’s eligibility for a payment arrangement.
- Capturing the terms of a payment arrangement such as the included service agreements, down payment amount, number of installments, and installment amount.
- Evaluating whether or not a payment arrangement request requires approval.
- User approval / rejection of a payment arrangement request.
- Monitoring for a down payment, if applicable.
- Creating the payment arrangement service agreement.

Refer to the Business User Guide for further information.

Payment Arrangements Control Central Portal

The **Pay Plan Tree Control Central** portal has been updated. It has been renamed to **Payment Agreements** and contains a new **Payment Arrangement Request** zone and the existing Pay Plan tree zone.

Enhanced Support for Third Party Payment Processing

In a previous release, capabilities for supporting third party payment processing were provided.

A third party payment processing system is a service provider that can handle all aspects of electronic payments for a utility. When this service provider is integrated with Oracle Utilities Customer Care and Billing, every payment made through channels such as web self-service or integrated voice response (IVR) is accepted and processed within the service provider's fully hosted payment acceptance environment. In this arrangement, payment data (credit card number, bank account number, etc) is stored and processed outside of the utility's network.

In this release, the C1-ThirdPartyVerifyAccount inbound web service for supporting account verification has been enhanced to return an account’s active / effective auto pay information, if it exists, to the third party payment processing system. This will help in assisting to prevent certain error conditions such as attempting to add an auto pay record that overlaps an existing auto pay record.

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
- Usage Subscription Type
- Usage Calculation Group
- Aggregation Group (used with Dynamic Aggregation)
- Data Source (used with Dynamic Aggregation)

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.

Cloud Service Foundation v19A Release Notes

This section describes enhancements and known issues in Oracle Utilities Cloud Service Foundation v19A.

Enhancements

This section lists enhancements in this release of Oracle Utilities Cloud Service Foundation, including:

- File Storage Switch to Oracle Cloud Object Storage
- Legacy Data Conversion Support
- Process Automation Tool Changes
- Batch Operations Support

File Storage Switch to Oracle Cloud Object Storage

In this release, file storage can only use Oracle Cloud Object Storage. Application Server shared storage and sFTP are no longer supported.

Oracle Cloud Object Storage is an Oracle Infrastructure Service that used by the system as the mechanism to share files between the customer and the cloud service.

Each customer has their own Cloud Object Storage account (Tenancy) use to upload or download documents that are needed for:

- Data Conversion - the data files
- Configuration Migration - the CMA export and import files
- Interfaces and integration - batch oriented import or export files.

Customers can use Object Storage to manage and store other documents that are not connected with the system in any way.

Existing and new batch processes can now read and write files from Object Storage.

For more information on object storage refer to the *Oracle Utilities Cloud Services Object Storage Setup Guide*.

Legacy Data Conversion Support

This release introduces new features that provide additional flexibility for Legacy Data Conversion upload implementation, including:

- The ability to create fully custom Control file for the Table an/or Maintenance Object data upload with SQL Loader
- Configuration allowing to exclude one or multiple CLOB fields from the legacy data extract
- Configuration allowing to override table's eligibility for conversion and convert tables that are not marked for conversion in the metadata.
- New batch process to copy the legacy keys from the main table and populate the corresponding Key table.

- The ability to re-enable conversion activities and perform incremental conversion

Process Automation Tool Changes

In this release, the integration related product codes in the Extendable Lookup K1-PAProductLookup, have been updated to have an inactive status. Future releases default Automation Tool In this release all integration products have been disabled. Refer to the values of the Extendable Lookup K1-PAProductLookup.

Batch Operations Support

A new feature is introduced in this release that provides support for batch scheduling operations. A user interface is provided to create batch job streams and manage their scheduling, including the ability to:

- Define, review and make changes to a series of batch jobs(called batch job streams) that are either scheduled or run ad-hoc in a simplified, business-oriented manner.
- Start, monitor and control execution of scheduled or ad-hoc batch job streams.
- Handle operational exceptions, fix errors and restart batch job streams
- Migrate job stream definitions from one environment to the other.

Known Issues

This section lists known issues and bugs not fixed in this release of Oracle Utilities Cloud Service Foundation.

Bug Number	Description
UCSF-3216	Currently when a batch job stream has failed on a step, the error or failure reason is not returned in certain cases.
UCSF-3505	Cancelling a batch job stream that has been running for a long time does not work.
UCSF-3300	When a batch job stream failed on a step, fixing the issue and re-starting the stream causes the stream to start from the beginning than from the failed step.

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 v4.3.0.5, 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.

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.