Oracle Utilities Customer Care and Billing

Release Notes

Release 2.5.0.1

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Oracle Utilities Customer Care and Billing Release Notes

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Preface

These release notes provide an overview of the enhancements, known issues, and other changes in this release.

Audience

Oracle Utilities Customer Care and Billing Release Notes is intended for anyone installing or using Oracle Utilities Customer Care and Billing.

Related Documents

For more information, refer to these Oracle documents:

Installation Guides and Release Notes

- *Oracle Utilities Customer Care and Billing V2.5.0.1 Quick Install Guide*

- *Oracle Utilities Customer Care and Billing V2.5.0.1 Installation Guide*

- *Oracle Utilities Customer Care and Billing V2.5.0.1 Database Administrator's Guide*

- *Oracle Utilities Customer Care and Billing V2.5.0.1 Optional Products Installation Guide*

- *Oracle Utilities Customer Care and Billing V2.5.0.1 License Information User Guide*

Administrative and Business User Guides

- *Oracle Utilities Customer Care and Billing V2.5.0.1 Administrative User Guide*

- *Oracle Utilities Customer Care and Billing V2.5.0.1 Business User Guide*

Supplemental Documents

- *Oracle Utilities Customer Care and Billing V2.5.0.1 Server Administration Guide*

- *Oracle Utilities Customer Care and Billing V2.5.0.1 Security Guide*

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Chapter 1

Release Notes

This document provides general information about this release of Oracle Utilities Customer Care and Billing, including new functionality, known issues, and other important information.

Refer to the *Quick Install Guide* and *Installation Guide* for information regarding supported platforms and installation steps.

This guide includes the following:

- Release Overview
- Database Changes
- New Functionality
- Oracle Utilities Application Framework Enhancements
- New System Data Details
- Known Issues
- Deprecation Notices
- Supported Integrations
- Demo Data Information

Release Overview

This section contains general information about this release of Oracle Utilities Customer Care and Billing version 2.5.0.1.

This release includes the following components:

* Oracle Utilities Customer Care and Billing version 2.5.0.1

* Oracle Utilities Application Framework version 4.3.0.1

Supported Platforms

See the Supported Platforms section of the *Oracle Utilities Customer Care and Billing Quick Install Guide* included in this release for an updated list of supported platforms.

Supported Upgrades

This version of Oracle Utilities Customer Care and Billing supports the following upgrade paths:

* Upgrade from Oracle Utilities Customer Care and Billing version 2.5.0.0 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 2.4.0.3 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 2.4.0.2 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 2.4.0.1 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 2.4.0.0 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 2.3.1 Service Pack 10 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 2.2.0 Service Pack 10 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 2.2.0 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 2.1.0 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 2.0.5 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 1.5.20 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 1.5.15 to version 2.5.0.1

* Upgrade from Oracle Utilities Customer Care and Billing version 1.5.10 to version 2.5.0.1

Database Changes

Version 2.5.0.1 also includes database enhancements. For more information, refer to the *Oracle Utilities Customer Care and Billing Database Administrator's Guide.*

New Functionality

This section describes new and enhanced features in this release of Oracle Utilities Customer Care and Billing. This release builds on the business functionality available in Oracle Utilities Customer Care and Billing V2.5.0.0.

This release includes:

- Person Contacts

- Notification Preferences

- Customer Program Management Enhancements

- DataConnect

- General Enhancements

Person Contacts

Person Contact is a new child of Person. Person Contact provides a place to consolidate all contact information such as phone number, e-mail addresses, and any other contact information contacts in one place. 'Do not disturb' information can be captured for each contact. A batch process, C1-INPUS (Create Person Contact from Person Phone/Email) is provided to create person contacts from person phone and e-mail.

Notification Preferences

Notification Preferences adds new functionality to send notifications to customers and maintain customer preferences for receiving or not receiving notifications. Notification Types are highly configurable and define the message, allowable channels, who can receive the notification, if a subscription is required or if the notification can be sent without a subscription, and more. Opting out is also supported.

Communication preferences are maintained in the **Account** portal. Additionally, communication preferences can be used to define preferences for e-mailing or faxing bills and quotes, including sending to multiple destinations.

Notification Changes

In previous releases, notifications were only supported through Customer Self-Service and Notification Center. A lookup, C1_NF_SSTASK_TYPE_FLG was used to define notification types. In this release, notification types are defined in a new object. The existing lookup was renamed to "Notification Type (Legacy)".

> **Upgrade note:** For existing implementations, an upgrade script sets the owner to 'CM' on lookup values C1FI and C1MP. If your implementation is not using Oracle Utilities Customer Self-Service and Oracle Utilities Notification Center, the two lookup values can be deleted.

Customer Program Management Enhancements

The Customer Program Management module has been enhanced to cater for additional market segmentation capabilities and enabling third party program management interaction.

Third Party Representatives are typically external parties that are equipped or skilled to undertake a specific set of tasks or work (for example: perform a site visit, energy audit, equipment installation etc). The Customer Program Management module has been enhanced to:

- capture third party representative information

- assign leads to third party representatives

- support notifying third party representatives of tasks or work to be carried out for a particular lead

- support receiving and capturing updates on the progress of the tasks or work associated with a lead.

Additional information may also be captured such as miscellaneous notes on leads and lead events, attachments on leads, the communication channel used to communicate with a customer for a lead event, and the response channel used by the customer when they responded to a lead to sign up for an initiative (or program).

DataConnect

The DataConnect extracts capability allows critical information to be extracted from Oracle Utilities Customer Care and Billing. These extracts can be used to integrate Oracle Utilities Customer Care and Billing with other utility applications or provide data to third party vendors.

In Oracle Utilities Customer Care and Billing, there are two types of DataConnect extracts:

- Master Data: Customer account related data from service agreements and account /person-related records; related service point and premise information; and related service point / meter history information.

- Billing Data: Billing related information. Both historical and current information may be extracted.

General Enhancements

- Increase 'Email Id' Field Size from 70 to 254 chars

- Increase 'Description on Bill' field size from 80 to 254 chars

- Show Characteristic on FA Info

- Show characteristic on SP Info

- Add Characteristic Type To Searches: Person, Premise, Customer Contact, Meter

- Support Control Central Icons on Toolbar

- New Optional Parameter **Apply Excess Credits**

  A new optional parameter **Apply Excess Credits** has been added to algorithm type **DEPREFMETH-D: Distribute the deposit amongst the customer's SA's**. If this parameter is provided and set to **Y**, excess credits will be processed by the overpayment distribution logic. Otherwise, the algorithm type will behave as before (credit will remain on the deposit SA). Note that existing algorithms for this algorithm type were not automatically updated to include the new parameter. If your implementation has an algorithm for this algorithm type and wishes to take advantage of the functionality, navigate to the algorithm and add a new effective dated algorithm parameter group. The new parameter will be visible and your implementation can configure the parameters as appropriate. (Bug 13698367 - Deposit Refunds Not Fully Transferring To Account's Other Active SAs)

- Credit Review Schedule Enhancement

  Currently, when scheduled payments are added for a pay plan, corresponding Account Debt Monitor (ADM) review triggers are created (i.e., credit review date entries are created for the scheduled payments in the Credit Review Schedule for the account). If the scheduled payments are deleted or the pay plan is broken with future scheduled payment dates, the ADM review triggers associated with the scheduled payments are not removed. As a result, an account may be reviewed unnecessarily.

  A new Option Type "Do Not Store ADM Scheduled Review Trigger for Pay Plan (Y/N)" is

provided for the 'Collection, Severance & Write Off' related Feature Configuration to control whether ADM review triggers should be created when scheduled payments for a Pay Plan are added. If the feature configuration option type is not configured, the existing behavior will continue.

Oracle Utilities Application Framework Enhancements

This section describes new and enhanced features in this release of Oracle Utilities Application Framework v4.3.0.1, including:

- System Wide Enhancements

- Online Help Enhancements

- Security Enhancements

- Configuration Tool Enhancements

- Batch Enhancements

- To Do Enhancements

- Miscellaneous Enhancements

- Extendable Lookup Enhancements

- Web Service Enhancements

System Wide Enhancements

New Login Screen Images

In this release, the image visible in the Login screen for the application has been changed.

New Session Expiration Behavior

In previous releases, if a user's session had expired, the user was still able to perform some tasks that did not require interaction with the server. When the system attempted to interact with the server, the user was then returned to the login screen or was presented with an error.

In this release, the system has been enhanced to detect the timeout and show an alert that the session has expired, informing the user to login again.

Indicating Required Fields

In this release, required fields (elements) are marked using an asterisk. This is visible on the maintenance dialog objects defined using a business object that are maintained on a portal-based page (also referred to as 'new style'). It is not visible on objects maintained on a fixed page (also referred to as 'old style').

Required elements for a row in a child collection (list) are also marked with an asterisk. Note that the system does not have any visual marking to indicate that at least one row in a child collection is required. It is only able to highlight which elements must be populated for each row.

The system relies on the field or element configuration (table/field metadata and BO schema configuration) to display the asterisk. If there are elements that are required via an algorithm or some other procedural code, the system is not able to detect that condition in order to display the asterisk.

If an implementation does not wish to enable this functionality, it may be turned off via the properties file. To turn this functionality off, uncomment the following setting **#com.oracle.ouaf.ui.disableRequiredFieldIndicators = true** in the **spl.properties.template** file.

Menu Behavior Enhancements

In the previous release, the menu behavior changed from the 4.2.x code line. In this release, some further changes have been made to the display of menus:

- Clicking the **Menu** or **Admin** button causes the first sub-menu to appear. If other sub-menu options are available, a right arrow is visible on the menu line, the user can mouse-over the menu line to show the sub-menu. The user may now click this menu line to lock

the sub-menu. The right arrow image is replaced by a padlock image. If the user's mouse moves away from the menu area, the locked sub-menu remains visible. This resolves the usability issue of needing to keep the cursor lined up on the menu line as the mouse is moved toward the sub-menu to further select the desired option.

The user may now do one of the following:

- Click on or mouse over the desired sub-menu line to further open the next level and ultimately click the desired option.

- Click on a different menu line to lock that sub-menu instead.

- Click the **ESC** key or click on an area of the page outside the menu to close the menu.

- For menu lines that support **Search** and **Add** options, the **Search** option now appears before the **Add**. This is an effort to use the menu line and item metadata configuration to drive the display. The base product menu lines always configure the search menu item first, followed by the add menu item. The menu rendering now follows that.

    Note: If your implementation has custom menu lines with multiple menu items where the add is configured as the first menu item and search as the second, then the menu rendering will reflect that.

- In the 4.2.x code line, the add option was rendered as an image (configured on the menu item). In 4.3.0.0, the menu rendering changed to use the word **Add** and an image is no longer used, however, the internal code still used the presence of the image reference in the menu item to signal which of the menu items is the 'add'. Because the image itself is not necessary, the code has been enhanced to cater for no image configuration. In this case, the system assumes that when a menu line has two menu items, the first menu item represents the search and the second represents the add.

    Note. For backward compatibility, the system will continue to look for an image and assume that the menu item with the image is the add. If your implementation has custom menu lines with two menu items, where the add is first (but still refers to an image), no changes are needed. (However, note that in this case, the add will display before the search option.) If you wish to remove the image (that is no longer needed), be sure that the search menu item is the first in the sequence.

Menu Configuration Enhancements

In this release, the Label Long on the Menu maintenance object has been suppressed from the user interface. This field is not used by the system.

In previous releases, the Description on the Menu maintenance object was only enabled for the **Main** and **Admin** menu types and was used to build the menu bar prior to version 4.3.0.0. In this release, the description is now available for all menu types and may be used to provide information about the menu. The menu search has also been enhanced to search by the description and to return the description in the results.

Toolbar History Enhancements

In this release, when a user navigates to a portal that is configured to display its information string as part of the page title (via the FK reference on the portal options), that detail is also visible in the **History** drop-down in the application toolbar.

This functionality is only available for portal based pages. It is not available for navigating to fixed pages. Also note that the current product standard is not to configure all-in-one portals to reference the information string.

Component Install/Deploy

In previous releases, installation and management of individual components of the product was complex. In this release the installation has now been altered to identify the roles supported by the installation to optimize the configuration and management of each installation. In this release, the online, integration and batch roles are supported to optimize the components available for configuration and deployment. An environment identifier has also been introduced to group disparate installations, even across machines, into a single managed environment. The roles for an installation are typically determined at installation time, but this enhancement allows change of roles after installation without the need for re-installation.

Online Help Enhancements

Oracle Help for the Web

In this release, implementations using WebLogic will see a new help implementation using **Oracle Help for the Web** (OHW). Besides a slightly different look and feel for the table of contents and the topics, OHW provides the following capabilities:

- **Full text search** - If there is a term that you want to find help about, you can use the full text search to find topics that reference that term.

- **Combined index** - In previous releases, if an implementation included multiple products in the stack, each with its own help set that was included, the index was separated. A user needed to first select the product and then search for the index term. With OHW, the index terms are combined for all products providing their separate help topics, increasing usability.

- Various usability controls such as paging through topics

- The ability to provide feedback to the documentation team through a feedback form

Oracle Help for the Web is not available in WebSphere. Clients using WebSphere will continue to see the **Classic** online help visible in previous releases.

Framework Help Included in Edge Product Help

In previous releases, the online help that is specific to the framework product was installed separately from online help provided by each edge product. The table of contents for the help was visible side by side. In the **Classic** help view, the index entries were kept separate as well.

Starting with this release, the edge products will incorporate the help for Oracle Utilities Application Framework into its build of the help.

The following provides additional details:

- For the business process chapters, the framework topics **User Interface Standard Features**, **To Do Processing** and **Reports** are incorporated into the outline of the edge product help in a location appropriate for that product's help. For a business user, this removes the distinction of what functionality is provided by the framework layer and what functionality is provided by the edge product.

- The business process chapters for **Batch Processing** and **External Messages** have been moved to the corresponding chapters in the *Oracle Utilities Customer Care and Billing Administrative User Guide.*

- In *Oracle Utilities Customer Care and Billing Administrative User Guide*, the full set of framework chapters are included, followed by the full set of chapters associated with the edge product.

Security Enhancements

In this release, the following enhancements have been made to the application security functionality.

Enhance User BO Used for External System Integration

In this release, changes have been made to the business object that is used to create Users from Oracle Identity Management (OIM) to support a template user.

In previous releases, in order to define a user from OIM, an implementation needed to define a Generic Technology Connector (GTC) to map information from OIM to the product. The implementation could choose to:

- Expose the information to the OIM administrative user to define the information when creating the application users. For example, for this new user, specify their Home Page or valid User Groups.

- Define standard values in the mapping file so that the OIM administrative user doesn't need to specify them for every user (for example the Language or the Time Zone).

In this release, the product provides the ability to use a template user in the application with appropriate configuration for users of that type. In OIM, the Generic Technology Connector (GTC) can be defined with the bare minimum needed to create a valid application user (such as their Name, Email Address and User ID) along with a template user from which all the other configuration data can be copied. This allows an implementation to define template users for standard roles. For example, in Oracle Utilities Customer Care and Billing, template users can be defined for Call Center Users, Billing Users, Collection Users, System Administrators, etc. Each template user can define the appropriate User Groups, Home Page, Portal Preferences, To Do Roles, etc for users in that role.

The **F1-IDMUser** business object (User for External System Integration) now has a pre-processing algorithm that looks for a template user (defined as a characteristic). It retrieves the configuration from the template user. It creates the new user with a combination of the information passed in from OIM (such as name, User ID, Email Address) and the information from the template user.

Separately Secure Change to a User's User Groups

The ability to change the Enable / Disable flag on the user record requires special security. However in previous releases, all other attributes of a user could be modified by anyone with security for the **Change** access mode, including the user group configuration.

In this release a new access mode (**Administrator**) has been introduced to the User application service allowing implementations to separately secure the ability to change a user's user groups.

> **Upgrade Note:** For backward compatibility, all user groups that have security for the Change access mode will be updated to also have security for the new System Administrator access mode. Implementations can then decide if they would like to take advantage of the new capability to limit which user groups should allow changes to the user's user group information.

Configuration Tool Enhancements

In this release, the following enhancements have been made to configuration tool functionality.

Schema Editor Enhancements

The following enhancements have been made in the schema editor for defining elements for a business object:

Enhancement to Map XML Element Definition

In previous releases, the schema editor's Map XML Field provided a search to find the appropriate field within the MO to use for the mapping. In this release, the field has been changed to a drop-down given the typically small number of CLOB or XML data type fields in a given MO.

Simple Field

In this release, a new schema editor element type **Simple Field** has been introduced to help simplify the steps needed to create an element that is mapped using Map XML. This can be thought of as a type of wizard for a specific type of **Field** element. It exposes a subset of configuration available for the **Field** element type. In the Database Mapping section, only the Map XML Field element is exposed.

Note that this is only available for the schema editor on Business Object because that is the only place where the maintenance object is known. For other schema editors on other pages, for example the Data Area schema editor, the **Field** element type must be selected to define this type of element.

Scripting Enhancements

The XQuery processor for scripting engines 2 and 3 has been upgraded. It now supports the functions '**matches**', '**replace**' and '**tokenize**'. In addition, it is able to reuse more XPath expressions than before. As a result, implementations can reduce the XQuery LRU cache size in the spl properties file (com.oracle.XPath.LRUSize). The adjustment depends on your specific implementation. A rough recommendation is to reduce the cache size by about one-third.

Batch Enhancements

In this release, the following enhancements have been made to batch functionality.

Batch Parameter Security

In this release, a new security flag has been added to the batch control parameter collection to indicate if there should be some security applied to the value of the parameter. The values of the security flag are **Encrypt** and **None**. The default is None. The configuration of the parameter value's security must be set on the batch control.

If the parameter value's security is set to **Encrypt**:

- Any default value set on the Batch Control will be stored in the database as encrypted

- When the batch job is submitted using Batch Job Submission, the value will be shown encrypted.

- In the log generated for the batch job, the parameter value will be written with asterisks.

  Upgrade note: All existing base product owned batch controls have been updated to set the parameter to **None** to maintain backward compatibility. The configuration of any base owned batch control may be changed by an implementation. The recommendation for the **F1-LDAP** (LDAP Import) batch control is to configure the 'password' parameter value to **Encrypt**.

System Health Check

In this release, a new service has been provided to assess the health of the system. The current implementation of this service is to execute the batch control - level of service algorithms. It is possible that in the future additional health check types may be supported.

The service can return an overall status based on the details of the health check (for example based on the details of the level of service algorithm results).

- 200 indicates that everything is normal /healthy.

- 203 indicates that a non-critical function is degraded

- 500 indicates that one or more critical functions is degraded

- The health check service maps the following results returned by the level of service algorithms:

- If at least one algorithm returns a value of Error, an overall status of 500 is returned

- If no algorithm returns a value of Error and at least one returns a value of Warning, an overall status of 203 is returned

- If all algorithms return a value of Normal, an overall status of 200 is returned.

An Inbound Web Service **F1-HealthCheck** has also been provided allowing external systems to use a web service to retrieve this information.

In addition, the product provides a Health Check portal that shows the details of the health check. The output of each batch control's level of service algorithm is displayed.

To Do Enhancements

This section describes To Do related enhancements.

Allow Additional Sort Keys on Manual To Dos

In previous releases, the product allowed for a To Do Post Processing algorithm to populate custom sort keys. However, in the case the standard sort keys for a manual To Do (User ID, User Name and Subject) were not populated by the system.

In this release, the product ensures that the standard sort keys of User ID, User Name and Subject are populated on a manual To Do Entry even when custom sort keys are also populated. The To Do Type must define the standard sort keys for the manual To Do entry (as described in the Online Help).

> **Note:** This functionality was originally implemented as a hot fix to the 4.2.0.2.0 code line via bug 20886978.

Miscellaneous Enhancements

Attachment Creation Enhancement

In previous releases, the procedure for creating an attachment was two steps: first choose the appropriate business object based on the type of attachment and enter a description; then upload the attachment.

In this release, the attachment creation has been streamlined to follow a more typical attachment dialog. Now when a user wants to create an attachment, first the user selects the file to upload. The system then determines the business object and prompts the user for the description (and any other fields that may get captured depending on your specific product). The uploaded attachment is then saved.

> **Upgrade note:** If your implementation has created customized dialogs to create an attachment and call the base BPA **F1-AttchMain** (Attachment Maintenance), some minor changes are required to your custom BPAs to align the script's data areas with the **F1-AttchMain**.

> In addition, if your implementation includes a custom BPA for uploading attachments and invokes the base UI Map **F1-AttachmentUploadPopup** following the pattern of the base BPA **F1-AtchUplod** the custom BPA will need to change how it invokes the Attachment Upload map to reflect the changes in the FW Attachment Upload BPA. The script step was changed from an Invoke Map step type to an Edit Data step type. It sets the target area as **Page Area** rather than **Pop-Up Window** and caters for the new Cancel action. Please contact Customer Support if you need more information.

Extendable Lookup Enhancements

This section describes enhancements to the extendable lookup.

Characteristics Added

In this release a standard characteristics collection has been added to Extendable Lookup. Extendable lookups may now be designed to capture additional information that may then be searchable by an algorithm or other internal process.

New CLOB Column Added

As previously delivered, the extendable lookup MO includes a standard CLOB column (**BO_DATA_AREA**) that is configured to be customizable. It means that if a product supplied an extendable lookup BO that defined additional information for each lookup value and supplied base values for the lookup with that additional information populated, an implementation could change the values of the additional information.

In this release, a new CLOB column has been added to the extendable lookup that is configured to not allow customization (BASE_BO_DATA_AREA). This allows product teams to define an extendable lookup BO that delivers base values and includes additional information that an implementation may not change.

For example, imagine a product defines a **Contact Type** extendable lookup that captures the addition information **Priority** and **Allow Extension**. In addition, imagine that the product supplied base values for the lookup and included delivered values for **Priority** and **Allow Extension**.

Code	Description	Allow Extension	Priority	Owner
C1-PHONE	Phone	Y	50	C1
C1-FAX	Fax	N	50	C1
C1-EMAIL	Email	N	10	C1

The design dictates that an implementation is allowed to change the Priority of the base record, but not the Allow Extension value. The design of the business object would look like this:

```
<lookupValue mdField="CONTACT_TYPE" mapField="F1_EXT_LOOKUP_VALUE"/>
<description mapField="DESCR"/>
<owner mapField="OWNER_FLG" dataType="lookup" lookup="OWNER_FLG"/>
…
<allowExtension mdField="ALLOW_EXT_SW" mapXML="BASE_BO_DATA_AREA"/>
<priority mdField="PRIORITY" mapXML="BO_DATA_AREA"/>
```

The Priority element is mapped to the customizable CLOB and the Allow Extension element is mapped to the non-customizable CLOB.

The following points should be noted about this functionality:

- An implementation may change the value of additional fields mapped to the customizable CLOB field (in the above example Priority). When upgrading to the next release of the product, the overridden value of Priority will be retained.

- An implementation may not change the value of additional fields mapped to the non-customizable CLOB field (in the above example Allow Extension). A user will receive an error when attempting to change the value via the application. If the value is changed in some other way, when upgrading to the next release of the product, the product's value for the elements will be restored.

  Note: At this time the error issued to a user attempting to change an element mapped to the non-customizable CLOB will reference the label of the physical column rather than the label of the element defined in the BO. Using the above example, the user will be told that you cannot change the value of Base BO

Data Area rather than being told that you cannot change the value of Allow Extension.

• If allowed by the extendable lookup, an implementation may add new extendable lookup values and may define the values of all additional fields as necessary. (In the example, values for Priority and Allow Extension may be defined as appropriate.)

Upgrade Note: As part of this enhancement, the base lookup values for the Schema - Element Types (**F1-SchemaNodes**) extendable lookup have been updated to define the values of the Property Control element in the non-customizable column. This element may not be modifiable by implementations.

Override Description Visible in Extendable Lookup List

Extendable lookup supports an override description. In previous releases, if the override description was populated, it wasn't shown in the extendable lookup list zone. In this release, this has been fixed. The override description is now visible in the extendable lookup list zone.

Add Action Moved to Page Actions Area

In the previous release of the product, the **Page Actions** area was introduced and many portals adjusted their user interface to define the **Add** action in the page action area rather than as a hyperlink in the zone header. Extendable Lookup was not included in that update. In this release, the Add action for the extended lookup is now visible in the page actions area.

Validation Added to Several Base Extendable Lookups

In this release, several framework-owned extendable lookup business objects were enhanced to include a validation algorithm to issue an error if an implementation attempts to add a new lookup value. The functionality related to the extendable lookups does not support custom lookup values. This was true in previous releases as well, but there was no validation preventing custom records from being added. (Any custom records that may have been added were simply ignored). In this release, the explicit validation has been included to avoid confusion.

The following table highlights the list of extendable lookups that do not allow custom lookup values.

Extendable Lookup Business Object	Description
F1-BooleanValues	Generic Boolean Values
F1-SchemaActionValues	Schema - Action Values
F1-SchemaBoolTrue	Schema - Boolean True
F1-SchemaBooleanValues	Schema - Boolean Values
F1-SchemaDataTypes	Schema - Field Element Data Types
F1-SchemaDefaultSysVariables	Schema - Valid System Variables
F1-SchemaDefaultTypes	Schema - Default Key
F1-SchemaDispNoneKey	Schema - Conditionally Hide Key
F1-SchemaDispNoneOperator	Schema - Condition Operator
F1-SchemaElementSuppress	Schema - Suppress Element
F1-SchemaElementVisibleOn	Schema - Element Visibility Control
F1-SchemaFlatFieldRowValues	Schema - Flattened Field Row Values
F1-SchemaFlatRowType	Schema - Flattened Row Types

Extendable Lookup Business Object	Description
F1-SchemaListOrderBy	Schema - List Order By Setting
F1-SchemaNodes	Schema - Element Types
F1-SchemaPageActions	Schema - Page Actions
F1-SchemaProtectKey	Schema - Protect Key
F1-SchemaSearchBy	Schema - Search By
F1-SchemaSectColumns	Schema - Section Column Display
F1-SchemaSelectKey	Schema - Dropdown Select Key
F1-SchemaXMLNameSpaces	Schema - XML Namespaces

Manual Transition of Sync Request

In a previous release, logic was added to support the ability for a user to manually transition a sync request that is currently in a state with a deferred monitor.

In this release, the action button that appears has been changed from **Process Sync** to **Process Now**.

Support Currency Symbol on Number Fields

Elements defined for unit rates typically capture amounts that have a large number of decimal places. The display of these amounts should include a currency symbol. These types of elements cannot be defined as money data types, because the amounts capture in money data types are validated against their currency's decimal configuration.

In previous releases, to display the currency symbol for these types of fields, special logic was required and automatic UI rendering was not possible. In this release, schemas may now define a currency reference for number data types. Automatic UI rendering will include the currency symbol of the referenced currency. The system ignores the currency decimal configuration.

Refer to the **Schema Tips** on the business object, business service, data area and service script pages for more information.

Web Service Enhancements

This section provides information about web service oriented enhancements.

Support XAI Service Deployment via Inbound Web Services

For implementations using XAI inbound services for external messages, the product recommends moving to the inbound web service mechanism, which uses the J2EE Web Application Server to communicate with the product rather than the XAI servlet.

In this release, the product supplies an interim solution for XAI inbound services that use the Core Adapter. These are XAI inbound services that reference an underlying page service in the product. For these services, converting them to use inbound web services requires a business service to be created for the underlying page service (if one doesn't already exist). However, the resulting schema produces for a business service differs from the Request and Response schemas for the analogous XAI inbound service (which are created using the Schema Editor). This requires a change to the integration to cater for the deferent schema.

Moving all incoming messages over to use IWS instead of XAI is the product recommendation. However, to aid in implementations that have many integrations in place using the XAI inbound services that use the Core Adapter (or any adapter whose message class is **BASEADA**), the

product provides the ability to deploy these types of XAI inbound services to the J2EE Web Application Server along with the Inbound Web Services.

To take advantage of this capability, you must define a feature configuration option. Under the **External Messages** feature configuration type, the **Support XAI Services via IWS** is used to indicate if this feature is supported. Setting the value to **true** turns on the feature.

> Refer to Support XAI Service Deployment via Inbound Web Services in the External Messages chapter of the *Oracle Utilities Customer Care and Billing Administrative User Guide* for more information.

MDB in Inbound Web Service

In the last few releases, the Message Driven Bean (MDB) was included in the online server and interfacing into XAI. In an effort to isolate messaging traffic from online traffic for capacity management, the MDB has been moved to the same server as Inbound Web Services to establish an effort to create an integration server. The MDB has been updates to use IWS within the same server. The existing MDB will be supported in this transition.

New System Data Details

This section provides information about new system data delivered in this release that may need to be reviewed for possible impact by implementations.

New / Updated Application Services

Application Service	Description	Access Mode	Comments
F1HEALTH	Health Check Portal	Inquire	Provided for the new System Health Check portal.
CILTUSEP	User	System Administrator	New access mode provided to allow implementations to secure changes to the user's user groups independently of other changes to the user.

System Data Update Details

This section highlights miscellaneous changes to system data configuration.

- The following maintenance objects updates were done to support Configuration Migration Assistant (CMA) functionality:

    - Access Group (**ACCT GROUP**) - An option for the option type Non-Migrated Table was added with the value CI_ACC_GRP_DAR. This is a many-to-many relationship between this MO and the Data Access Group MO. For CMA purposes, the MO is now configured to copy this data across only with the Data Access Group.

    - To Do Role (Without Users) (**TO DO RL SC**) - An option for the option type Non-Migrated Table was added with the value CI_TD_VAL_ROLE. This is a many-to-many relationship between this MO and the To Do Type MO. For CMA purposes, the MO is now configured to copy this data across only with the To Do Type.

- The maintenance object Service Task (**F1-SVCTASK**) was updated to configure its ILM Eligibility algorithm. This MO was enabled for ILM but did not have the eligibility algorithm configured.

- The maintenance object Web Service Annotation (**F1-IWSANN**) was updated to remove the table F1-IWS-SVC-ANN. This table was incorrectly included in that MO. Although it is a 'many-to-many' table between Inbound Web Service and Web Service Annotation, the information is only maintained on the Inbound Web Service.

- The lookup **F1_BATCH_LEVEL_OF_SERVICE_FLG** has been changed to be non-customizable. This was incorrectly marked customizable in a previous release. The product does not support additional values.

- The description of the lookup value **F1SU** for field **ACCESS_MODE** has been changed from Super User to System Administrator.

- The description of the feature configuration type **F1EM** was changed from Email Configuration to External Messages. This feature type may be used to define options for other functionality related to external messages.

Known Issues

The following table lists known issues in Oracle Utilities Customer Care and Billing version 2.5.0.1 at the time of release.

Bug Number	Description
21508995	Complete support of increased field length of Description on Bill - The expanded description on bill change was pulled out of the release during the QA cycle. The feature will be completed and made available for download shortly after release.

Bug Fixes Not Included in This Release

This section lists bug fixes released for previous versions of the product that have not been included in this release. These fixes are planned for a future date for the current release using the bug numbers listed in the tables below:

Oracle Utilities Customer Care and Billing

Original Bug	Original Version	Description	2.5.0.1 HOT
18596562	2.4.0.3.0	CSV File Upload for Rate Check - Indicate success and number	20070691
21253210	2.4.0.2.0HOT	AUTO-X ALG C1-BSAXMINGR unable to handle consumption exceeding threshold properly	21258550
21682617	2.4.0.2.0HOT	Overpayment transfer payment distribution doesn't take into account SA type payment	21693628
21752415	2.5.0.0.0HOT	Special character found when triggering C1-BL-DISP (CIPBBLDX)	21889862
21791426	2.5.0.0.0HOT	Able to delete a Calc Group that was already referenced on RA	21896779
21809682	2.5.0.0.0HOT	PATCH 21783462 did not resolve the issue of TD-HILO number format exception	21896811
21856977	2.5.0.0.0HOT	Bill seg generation throws system error calculating for zero	21896836

Oracle Utilities Application Framework

Original Bug	Original Version	Description	4.3 Bug Fix
16418652	2.2.0	Printing zone outputs in portrait instead of landscape	21125562
20570324	4.2.0.1.0	Search window will not launch when ie 9 browser zoom set to 150% magnification	20570329
20402091	4.2.0.2.0	Back button 2x "forgets" selected query in query option list	21057709
20886978	4.2.0.2.0	Manual to do sort key defaulting not firing when post processing algorithm is plugged in	21647035

Original Bug	Original Version	Description	4.3 Bug Fix
20914088	4.2.0.2.0	Label font color changed?spacing displayed in Chrome	21903486
21209873	4.2.0.2.0	Query zones with filter UI Maps do not restore input filters with defaults configured	21210495
21104664	4.2.0.3.0	Label font color changed?spacing displayed in Chrome	21903486
21104765	4.2.0.3.0	Data grid shows extra column in Chrome	21294297
21243926	4.2.0.3.0	Filter values disappear on navigating back/forward in Chrome	21265682
21260161	4.2.0.3.0	Billable charge screen hangs on pricing info tab in Chrome	21287396
21304345	4.2.0.3.0	Link issue on account collection summary in Chrome	21339872
21308694	4.2.0.3.0	Label font color changed?spacing displayed in Chrome	21308984
21355708	4.2.0.3.0	Orahandledependentdatetime function is not working for date time fields in list	21441766

Deprecation Notices

This section describes items that are deprecated in this release or planned for deprecation in a future release, including:

- Deprecated Functionality in This Release

- Deprecated Notices for Oracle Utilities Application Framework 4.3.0.1

- Deprecated Functionality Planned For Future Releases

Deprecated Functionality in This Release

The following platforms and functionality are not supported by this version of Oracle Utilities Customer Care and Billing:

- Configlab: This has been superseded by the Configuration Migration Assistant (CMA) functionality that has been available since Oracle Utilities Customer Care and Billing version 2.4.0.1

- Archiving Engine (COBOL based) – This has been superseded by the Information Lifecycle Management (ILM) functionality that has been available since Oracle Utilities Customer Care and Billing version 2.4.0.2.

- COBOL-based Oracle Utilities Analytics extract programs – These have been superseded by new Extract – Load – Transform (ETL) modules based on Oracle GoldenGate/Oracle Data Integrator. Oracle Utilities Customer Care and Billing implementations using the COBOL-based modules must upgrade to Oracle Utilities Analytics version 2.5.1 and use the new ETL modules.

- The original database link-based integration between Oracle Utilities Customer Care and Billing (CCB) and Oracle Utilities Network Management System (NMS) has been superseded by the productized Oracle Utilities Customer Care and Billing Integration to Oracle Utilities Network Management System. The productized integration has been available since Oracle Utilities Customer Care and Billing version 2.3.1.

  - Deprecated COBOL Programs:

    - CIPQEFAX – Create Outage Call FA

    - CIPOSOCP – Process an Outage Call FA

    - CICOSOCP – Corresponding Copybook

    - CICOSOCD – Corresponding Copybook

    - CIPOBCOX – Complete Outage Call FA

    - CIPOWOIX – Send Outage Calls

  - Deprecated UI Pages:

    - outageInfoCrewGrid.xml

    - outageInfoMainPage.xjs

    - outageInfoMainPage.xml

    - outageInfoTabMenu.xml

  - Deprecated Algorithm Types:

    - CSEN-CRE-FA

    - FACT-CMPOTG

    - FWFM-OMS-INT

  - Deprecated Algorithms:

- CSEN-CRE-FA

- After Bug 20082752 converted Sync Request BOs to use UI hints, the following are now unused:

  - Sync Request display map (C1-SyncRequestDisplay)

  - Sync Request display map service script (C1-SyncRDisp)

- Bug 11743591 - DEPRECATION ANNOUNCEMENT - XAI DOWNLOAD STAGING COBOL VERSION. Purge all XAI Download Staging's COBOL-related System Data and Programs. For the complete list of deprecated objects refer the bug PFD.

- Bug 14708439 - DEPRECATE ANNOUNCED DB COLUMNS - Remove ALLOW_CR_NOTE_SW from table. The following files are affected:

  - …\modules\cm\xai\schemas\SSvcInstallationOptionsMaintenance.xsd

  - …\modules\xai\schemas\cm_deprecated\schemas\SSvcInstallationOptionsMaintenance.xsd

Deprecated Notices for Oracle Utilities Application Framework 4.3.0.1

- The table usage flag (TBL_USAGE_FLG) on MD Table (CI_MD_TBL) and the field usage flag (FLD_USAGE_FLG) on MD Table Field (CI_MD_TBL_FLD) will be deprecated in a future release. The fields are not used by the product.

- 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.

  - Business Object **F1-EnvironmentRefPhysicalBO**

  - Maintenance Object **ENV REF**

- 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 functionality via XAI will be deprecated in a future release:

  - XAI Inbound Service **LDAPImport**

  - XAI Adapter **LDAPImport**

  - Message Class (formerly XAI Class) **LDAPIMPRTADA**

- 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

System Data Deprecation

The following points highlight system data deprecation in this release.

- The service program **EMAILSERVICE** (Email Service) is invalid and has been removed. The service program **F1-EMAILSERVICE** is the valid one provided for the real-time email service functionality.

- The lookup value F1LR for the algorithm entity flag lookup (ALG_ENTITY_FLG) is invalid and has been removed.

- The application services **F1BTCLSP** (Batch Cluster), **F1CLTHDP** (Batch Cluster Thread Details) and **F1CLUSTP** (Batch Cluster Portal) have been removed. They were not used for any base functionality.

- The following zones have been removed. **F1-CLSDETAIL** (Cluster Details), F1-**CLSMEMBER** (Cluster Members), **F1-CLSTHPOOL** (Cluster Thread Pools), **F1-CLUSJOBS** (Batch Jobs), **F1-CLUSTER** (Batch Cluster), **F1-CLUSTHRD** (Batch Threads). They were not referenced by any base functionality.

Deprecated Functionality Planned For Future Releases

The following functionality is planned to be deprecated in a future product version release:

- XAI Inbound Services - This has already been superseded by the Inbound Web Services functionality that has been available in the product since Oracle Utilities Customer Care and Billing version 2.4.0.2.

  For more information on migrating from XAI to IWS, please refer to *Migrating from XAI to IWS Oracle Utilities Application Framework (Doc ID 1644914.1)* on My Oracle Support.

- Oracle Utilities Customer Care and Batch Scheduler - The batch scheduler is planned to be deprecated in a future release of Oracle Utilities Customer Care and Billing. Oracle Utilities Customer Care and Billing implementations using the batch scheduler to manage the periodic execution of batch processes are recommended to use an enterprise job scheduler such as:

  - Oracle Scheduler: Oracle Scheduler (DBMS_SCHEDULER) is a database feature that provides job scheduling functionality.

Supported Integrations

The following integrations are supported in this version of Oracle Utilities Customer Care and Billing (CCB):

Oracle Application Integrations

- CCB version 2.5.0.1 to E-Business Suite (Revenue Accounting) version R12.2.2.x or 12.1.1.x

- CCB version 2.5.0.1 to PeopleSoft (Financials) version 9.2

- CCB version 2.5.0.1 to JD Edwards (Enterprise One) version 9.1

Oracle Utilities Product Integrations

- CCB version 2.5.0.1 / Oracle Utilities Analytics version 2.5.1

- CCB version 2.5.0.1 to Oracle Utilities Meter Data Management version 2.0.1.8+ and version 2.1.0.1+

- CCB version 2.5.0.1 to Oracle Utilities Network Management System version 1.11.0.0 and version 1.12.0.0

- Oracle Integration Pack for Oracle Utilities Field Work version 11.2

  - Oracle Utilities Mobile Workforce Management version 2.0.1.3, version 2.1.0.0 and version 2.2.0.2+

  - Oracle Utilities Work and Asset Management version 1.9.0.1 and version 1.9.1.x

Additional Integrations

- Oracle Documaker version 12.3

- BI Publisher version 11.1.1.9.0

- Oracle Utilities Customer Self Service version 2.1.0.2

- Siebel version 8.1.1.6

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 package and includes its own installation instructions. Please refer to the installation guide for more information or contact Oracle Support.