Oracle Enterprise Taxation and Policy Management

Release Notes

Version 2.3.0

E21670-01

February 2011

ORACLE

Oracle Enterprise Taxation and Policy Management Release Notes

E21670-01

Contents

Preface

These release notes provide an overview of the enhancements and known issues in Oracle Enterprise Taxation and Policy Management version 2.3.0.

This preface contains these topics:

- **Audience**
- **Related Documents**
- **Conventions**

Audience

Oracle Enterprise Taxation and Policy Management Releasea Notes is intended for anyone installing or using Oracle Enterprise Taxation and Policy Management version 2.3.0.

Related Documents

For more information, see these Oracle documents:

- *Oracle Enterprise Taxation and Policy Management Quick Install Guide*
- *Oracle Enterprise Taxation and Policy Management Installation Guide*
- *Oracle Enterprise Taxation and Policy Management Database Administrator's 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.

Convention	Meaning
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

These release notes describe enhancements and known issues for Oracle Enterprise Taxation and Policy Management version 2.3.0. It contains the following sections:

- **About this Release**
- **Enhancements in Oracle Enterprise Taxation and Policy Management**
- **Enhancements in Oracle Utilities Application Framework**
- **Known Issues in Oracle Enterprise Taxation and Policy Management**
- **De-Supported Platforms**

About this Release

Please visit My Oracle Support (http://support.oracle.com) for the most recent service packs and/or patches for this release to ensure you have the most current version of this product.

Enhancements in Oracle Enterprise Taxation and Policy Management

This section describes new and enhanced features in Oracle Enterprise Taxation and Policy Management version 2.3.0. Refer to **Enhancements in Oracle Utilities Application Framework** on page 1-15 for information about the new and enhanced features in the application framework.

General System Enhancements

New User Interface Standard

Refer to **Enhancements in Oracle Utilities Application Framework** on page 1-15 regarding the new style sheets adopted in this release.

The product is adopting a new standard for display that has been followed for new maintenance pages:

- The main Display UI map of a business object uses a two column format whenever possible. This allows more information to be displayed and minimized the vertical scrolling.
- A special Record Information section in the Display map is used for information that is considered "internal" or "technical". The section is displayed in the right column and is collapsed by default. A user may expand the section to view the detail if desired. Some examples of the data that will be included there are the system generate primary key, the Business Object and the Status Update Date / Time.
- Instead of a separate Actions zone, the Display map of a business object includes a Record Actions section.

Note that maintenance portals in existence prior to this release have not been retrofitted for the new standard at this time.

New Favorite Scripts Dashboard Zone

In previous releases a "wizard hat" icon in the toolbar allowed a user to access their favorite scripts and search for BPA scripts. As part of the framework changes, this icon was removed and was replaced with a new Favorite Scripts dashboard zone.

The Favorite Scripts zone is not configured for display on the dashboard by default. If your implementation's users often used the BPA "wizard hat" icon in the previous release to launch favorite scripts or to search for scripts to launch on an ad hoc basis, then you may override the configuration of the dashboard portal in your implementation to indicate this zone should display for your users.

Go to **Admin > Portal** and select the dashboard portal (CI_DASHBOARD).

Control Central Access via Menus

As part of the new style sheet adoption, the toolbar has been streamlined and several existing toolbar icons are no longer available. Two of these icons allowed the user to navigate to Control Central:

- Control Central Search (formerly a Target icon in the toolbar). An entry has been added to the Main Menu allowing a user to navigate to the Control Central Search page. As before, a

user is able to configure Control Central Search as their home page and can configure it in the Favorite Links.

> **Note:** In addition to navigating to Control Central search, the target icon also reset the current person and account information in context. In this release, the menu entry navigates to control central search, but does not reset the person / account in context. Upon selecting a new person / account the context is refreshed with the new information.

- Control Central - Account Information (formerly an icon in the toolbar with a house and person together). The Account Context menu has an entry to Go To Control Central, which navigates the user to the Account Information tab on Control Central for the account in context. As before, a user is able to configure Control Central Account Information in the Favorite Links.

Policy Modeling and Policy Automation

Oracle Enterprise Taxation and Policy Management adds application specific usage of the Oracle Policy Automation and Oracle Policy Modeling products with Oracle Enterprise Taxation Management. Customers with Oracle Enterprise Taxation licenses are not required to migrate to Oracle Enterprise Taxation and Policy Management, but will not have access to the policy modeling and policy automation features. These features provide the ability to transform complex policies from the source documents in MS Word and Excel, in multiple languages, into executable business rules. In addition, these feature provide the ability to track policy changes and trace back to source material, define test cases, and compare results across policy versions. This release includes sample rules for Social Security Number validation and Appeal eligibility. This release also includes a new Web Services feature to utilize for policy integration (See the **Oracle Policy Automation (OPA) Integration** on page 1-33 in the Oracle Utilities Application Framework section.)

Product Modules

Starting with this release, the product will use appropriate product modules to group together functionality into logical groupings. For future installations, the product license may be defined to not include certain modules that are not applicable to the implementation. The logic for modules that are not applicable can be turned off using the **Module Configuration** Feature Configuration (F1_MODULECFG).

The following points identify the modules defined in the release along with the functionality that they cover.

Foundation module provides an infrastructure for functional modules and supports a customization toolkit. All features and functions in Foundation are generic in nature and may be extended as needed. This includes case and process flow management, ConfigLab, various database and security related transactions. Foundation module is shared by ETPM and OAUF; it is a mandatory pre-requisite to other modules and should not be turned off.

Registration module is used for capturing taxpayer demographic and account information. This module includes all elements of the account model, including Person, Account, Tax Role, Obligation and Location.

Accounting manages taxpayer and revenue accounting business processes. This includes; maintaining adjustments, calculating penalties and interest, granting waivers, processing overpayments, managing distribution codes, financial transactions, accounting calendars, fund accounting, GL divisions and cash accounting features.

Forms module includes all elements related to the configuration and processing of registration and tax forms, including Form Type, Form Upload, Tax Form and Registration Form.

Payment module is responsible for process incoming and outgoing payments. This includes; maintaining bank and bank account information, payment distribution and priorities, tender and deposit control information and managing the actual payment events and automatic payments

Billing manages the bill generation process. The functionality includes: Bill Cycle, Bill Message, Bill Period, Bill Segment Type, Bill Charge Type, Billable Charge Template, Bill, Bill Segment, Billable Charge and Billable Charge Upload

Case Management module includes all business processes that require a workflow. This includes: Overdue Process, Collection Case, Collection Agency Referral, Pay Plan, Bankruptcy, Suppression, Audit and Appeals.

Refer to **Appendix A: Application Module Assignment** for detailed transaction/module assignments.

Menu Changes

The Main and Admin menus have been restructured to align more closely with the product module categorization.

- There are several new submenus, narrowly focused on a specific functional area: **Payment, Billing** and, partially, **Accounting** replace a **Financial** submenu that covered a broad range of features.
- The **Financial Query, Financial** and **Compliance** submenu has been removed. The entries that had been in this menu are now found in the appropriate payment, billing, accounting or case management menu.
- **Taxpayer Information** submenu was changed to **Registration.**

Refer to **Appendix B: New Menu Layout** for detailed description of menu changes.

Get Next Caller Functionality

As part of the new style sheet adoption, the toolbar has been streamlined and several existing toolbar icons are no longer available. One icon allowed a user to "get next caller" if the implementation integrated with a computer telephony integration system.

In this release a new BPA script C1-GetNxtClr has been provided to perform the same functionality that had been provided by the Get Next Caller icon. Call center users that are connected to the computer telephony integration system can configure their Favorite Scripts dashboard zone to include this script.

As part of this enhancement, the CTI Integration flag on the Installation Options was removed. The purpose of the flag was to allow an implementation to configure whether the old toolbar icon should appear. Now that the functionality is driven through a BPA script, implementations have control through configuration to enable the script when needed.

> Refer to the Computer Telephony Integration section in the Administration \ Defining General Options Addendum in the user documentation for more information.

Several Searches Provided for UI Map Searching

In this release of the framework, UI maps have been enhanced to allow searching for a foreign key value, where the search invoked is a query style Zone. In addition, the FK reference has been enhanced to allow a query Zone to be defined for a given object. Refer to the framework release notes for more information.

To accompany this change, the following additional enhancements have been done in this release:

- Any existing query zone that had been provided in a previous release for a base stand alone search portal has been enabled to allow it to be used as a search zone from a UI map. Namely, the new Search Result Info parameter has been configured appropriately on each zone.
- Several search zones were created for existing base entities that are not currently maintained via the portal / zone metaphor:
    - Account

- Person
- Obligation
- Adjustment Type
- Tender Source

- Existing base product FK references have been updated to refer to the appropriate search Zone, if applicable.

Taxpayer Information Enhancements

Account Characteristics Are Searchable

In this release enhancements were made to allow appropriate searching for an account via one of its characteristic values.

- A searchable characteristic value was added. When adding or updating any characteristic value (pre-defined, ad-hoc or foreign key), the searchable characteristic value is populated.
- The account search window has been enhanced to include a search by characteristic type / value.

  Note: Refer to the characteristic type documentation for more information about searchable characteristics.

Obligation Search Enhancements

In this release the obligation search has been enhanced to include start and end date in the Person Name search and Account related search.

Case Management Enhancements

Suppression Processing Introduced

In this release, functionality is provided to support the suppression of certain types of activity on persons, accounts, tax roles or obligations. A suppression object provides the functionality to define the types of processing that should be suppressed and the specific entities that are subject to the suppression. Note that it is the responsibility of the processes that may need to take suppression into consideration to check for the existence of suppression objects that reference related entities, such as the obligation being processed. Then base package provides examples of how suppression may be used to affect penalty and interest calculations, overpayment processing and overdue processing.

Refer to the Big Picture of Suppression section of the user documentation for more information.

Appeal Processing Introduced

In this release, functionality is provided to support appeal processing. An appeal process provides the functionality to manage a request from a taxpayer for a change to a decision by the tax authority, based on the tax authority's rules. This includes the ability to track various persons, users and other items that may be related to the appeal and the ability to record and track both internal and external review events, such as when an appeal is escalated to a judicial court.

The appeal business object supplied with the base package includes functionality for maintaining any related suppressions at specific states in the appeal's lifecycle.

Refer to the Big Picture of Appeals section of the user documentation for more information.

Review Processing Introduced

In conjunction with the introduction of Appeal processing, functionality is provided to support review steps as independent processes subordinate to a main process. A review process provides the functionality to trigger one or more independent events that are part of another process but have their own common attributes and a separate lifecycle. This includes the ability to record key dates, reviewer and taxpayer responses and the ability to define a formal sequence of review events that should be followed. The base processes that currently support the creation of reviews are the appeal and audit case processes.

Refer to the Big Picture of Reviews section of the user documentation for more information.

Audit Case Processing Introduced

The ability to manage audit cases is provided in this release. An audit case can capture key information such as: type of audit case, obligations that are being audited, other persons related to the audit case and users who are responsible for the audit case.

The audit case business object supplied with the base package includes a lifecycle with steps that are common to audit cases. It also includes functionality for maintaining any related suppressions at specific states in the audit case's lifecycle. An additional action for letter creation is also supported.

The audit case base business object also supports the integration of Review functionality (which was introduced for appeals processing), if needed. An action for creating audit case reviews is included.

Refer to the Big Picture of Audit Cases section of the user documentation for more information.

A number of related enhancements to tax form processing are also introduced to support audit tax form requirements. See **Tax Form Enhancements for Audit Case Processing** for more information.

Bankruptcy Processing Introduced

Bankruptcy processing is provided in this release. This functionality gives the ability to record key information about a bankruptcy case such as: type of bankruptcy, court in which the bankruptcy was filed, taxpayer's obligations that are included in the bankruptcy, key dates/milestones, other persons related to the bankruptcy case and users who are responsible for the bankruptcy case.

The bankruptcy business object supplied with the base package includes a lifecycle with steps that are common to bankruptcies. It also includes functionality for maintaining any related suppressions at specific states in the bankruptcy's lifecycle. Note, however, that discharge processing (e.g. write off) is currently assumed the implementation's responsibility.

Additional actions for creating proofs of claim and creating payment plans are included.

Refer to the Big Picture of Bankruptcy section of the user documentation for more information.

Forms Processing Enhancements

Define Application Service on Form Type

In previous releases, there was no way for a user to specify the application service to use for the generated Form business object. The system always generated a new application service with the same name as the business object.

In this release a user may specify the application service to use when initially generating a form if an existing application service should be used instead of generating a new one. This is useful for implementations that prefer to use a common application service for a broad category of form types. For example, if users have security to work on corporate income tax forms across multiple years, a single “corporate income tax” application service may be defined and linked to new forms generated for this tax type.

The application service related to the form type's transaction business object is displayed on the form type with a hyperlink. This allows a user to more easily drill into the application service to view or update security configuration.

Form Section List on Form Type is Initially Collapsed

In this release, the form type portal has been configured to mark the Form Section List zone as initially collapsed. When viewing a form type a user can choose to expand the list to view the list of form sections for the form type.

Tax Form Enhancements for Audit Case Processing

A number of enhancements to tax form processing are provided to support audit case processing requirements such as 'what if' calculations and audit assessment reviews.

- The **Audit** action is introduced. This action is available on the **Posted** state. It creates a new **Pending** form with a filing type of **Audit** and copies the information from the **Posted** form to the new form. The auditor could then make the necessary changes on the new form and validate accordingly.
- The Audit Case ID field is added to the tax form. This field was added both as a column in the tax form table and as an element in the parent tax form business object C1-ParentTaxForm schema. The **Audit** action includes a dialog to select the audit case ID to link to the audit form. The parent tax form's display map was also modified to show audit case information for audit forms.
- The **Re-edited** state is added to the parent tax form business object C1-ParentTaxForm. A form that passes validation goes to the **Ready for Posting** state. In previous releases, when form gets to this state, changes are no longer possible. In this release, the transition form **Ready for Posting** to **Re-edited** is introduced, to allow for any necessary changes and re-validation. This would support not only the requirements for audit tax forms, but also the general need to re-edit any tax form that has passed validation.

  Access Mode consideration: Your implementation may have child business objects that refer to the C1-ParentTaxForm as a parent business object. For any existing child BO, please add the Re-edit access mode to the BO's application service. Refer to the application service C1-PARENTTAXFORMBOAS for an example.
- The **Ready for Posting** form rule event and 'Create Proposed Assessment for Audit Form' form rule are introduced. The rule populates the Proposed Assessment Amount field, which was added as an element in the parent tax form business object C1-ParentTaxForm schema.
- An Audit Balances zone is added to the tax form portal. This zone appears for tax forms with filing type of **Audit** where are an assessment (proposed or actual) is already calculated. The zone shows the detailed P&I view for the audit assessment.

Miscellaneous Tax Form Changes

The following points highlight additional changes to the parent tax form business object C1-ParentTaxForm:

- A business object validation plug-in was added for validating that the Edit action is allowed. This validation checks for the 'Allow Edit' status category on the current state.
- Update P&I plug-ins. The business object has been enhanced to include a plug-in to Update Penalty and Interest when entering the **Posted, Adjusted, Transferred** and **Reversed** states. Note that the update to P&I is a separate plug-in rather than a Form Rule to cater for P&I calculations to rely on the form being updated after any posting, adjusting, transferring or reversing rules have been executed.
- The following points highlight changes to the base tax form user interface components:
- The main tax form display map fragment has been updated to display the related form upload staging record, if applicable.

- The main tax form maintenance map fragment has been enhanced to prevent modification of the form source if the form is linked to a form upload staging record.
- The document locator number has been moved to below the form source on the maintenance map fragment.
- The Tax Form Exceptions display map has been enhanced to allow a user drill to the form line associated with the exception record, if applicable.

Use Log on Adjustment to Reference Related Form

In previous releases, base form processes used a characteristic on adjustment to identify the form that caused the adjustment to be created. In this release, adjustments now have log records. As a result, the base processes are now using a log record to reference the related form that created it. A special log type Related Object has been introduced for this purpose. Note that this log type is not unique to Adjustments and can be used on any log on any MO to reference a related object.

An upgrade script is provided to create a "related object" log record for any adjustment that currently references a characteristic using the C1-TXFRM or C1-WAIVR characteristic types.

New Form Rules

In this release, several new base form rule business objects have been introduced. Refer to the business object descriptions for each for more information on their functionality.

- Determine Taxpayer
- Determine Account and Tax Role
- Determine Filing Period Obligation
- Create Taxpayer
- Create Account and Tax Role
- Create Obligation
- Required Element Validation
- Apply a Rate
- Cancel Form Adjustments
- Populate Tax Amount Owed / Overpaid.
- Create Proposed Assessment for Audit Form - this calculates a proposed assessment for tax forms with a filing type of Audit. This form rule will allow for audit-related assessments to be reviewed prior to actual posting. See **Tax Form Enhancements for Audit Case Processing** for more information.

  Note: The Create Proposed Assessment for Audit Form rule is designed for the **Ready for Posting** form rule event, which was also introduced in this release.

Registration Forms Enhancements

- Account ID has been added as a column to the registration form maintenance object.
- Registration form has been enhanced to include improvements that were added to Tax Form functionality in a previous release. A new parent registration form business object is introduced to support
  - Form version functionality
  - Form rules processing
  - Exceptions processing

- Registration forms can be generated using the forms definition functionality. A new base form type business object is provided for the purpose of generating registration form business objects. Refer to the definition of the business object C1-StandardRegFormType for more details.

Taxpayer Accounting Enhancements

Credit Allocation Zone Enhancements

In this release, the credit allocation zone linked to the Control Central Account Info and Taxpayer Info portals has been enhanced as follows:

- Only non-closed, non-canceled obligations are included by default. This means that when performing the Display Allocation function at the Taxpayer or Account level only "current" obligations are included. It also affects the list of obligations available when drilling into the Obligation level.
- A user may opt to include closed obligations. When this occurs, the list of obligations available when drilling into the obligation level includes closed obligations. And when displaying the allocation balance for the account or taxpayer level, the balances for closed obligations are included.

The Forecast P&I and Update P&I actions always ignore closed obligations.

Detail View of P&I

In this release new functionality is provided to populate and view details to support individual penalty and interest calculations:

- The penalty and interest FT details data area allows for one or more calculation details to be populated. Each P&I Rule algorithm that calculates the amount is responsible for populating the details as appropriate for the rule logic.
- The P&I Rule algorithms provided by the base product (C1-PI-RP-MNT - Monthly Calculation and C1-PI-RP-RF - Rate Factor Calculation) have been updated to produce details based on the functionality of each algorithm. Refer to the algorithm type descriptions for more information.

The new calculation details are only provided when the calculate penalty and interest routine is called in P&I Detailed Forecast mode. (See below) The details are not stored with the penalty and interest adjustments themselves.

- A new portal is provided to view the penalty and interest details for a given obligation. Once an obligation and a date are provided, the calculate penalty and interest routine is called in Forecast mode and the details are displayed to the user in a tree format.

To ensure the extra work of populating the calculation details is not done for every request to forecast P&I (when some requests do not require the extra detail), a new input parameter has been introduced to the following plug-in spots: P&I Calculation, Retrieve FT Details and P&I Rule Processing: P&I Calculation Action, with values of **P&I Calculate/Update, P&I Standard Forecast** and **P&I Detailed Forecast.**

- For any call to the base P&I Calculation algorithm where this new input parameter is not populated, the algorithm populates it appropriately based on the Allow Update parameter. For any call to the base P&I Calculation algorithm where this new input parameter is populated but the historic Allow Update parameter is populated, the new P&I Calculation Action is populated appropriately.
- The base Retrieve FT Details algorithm has introduced new logic when the P&I Calculation Action is set to P&I Detailed Forecast. It does not retrieve the existing P&I transactions. This forces the P&I Rule algorithms to build the P&I transactions from the beginning and populate the Calculation Info accordingly. Without this change, the output of the detailed

forecast may not produce desired results if there is logic in the P&I Rule Processing algorithms to produce "delta" transactions.

Customizing Information Available to P&I Calculation

In previous releases, if an implementation required additional detail available during the P&I calculation process, the base product data areas provided (C1-PI-MainFtInfo and C1-PI-InternalCalculationInfo) needed to be duplicated and customized and the P&I algorithms needed to be adjusted to provide the name of the new data area to call.

In the release, the framework has been enhanced to allow dynamic extension of data areas. This means that it is possible to extend the above base data areas when additional data is needed, avoiding the need to change the algorithms to provide the new data area name.

Log Added to Adjustment

In this release, adjustment has been enhanced to include a log table.

The new base adjustment user interface displays the Related Object log entry in the Record Information section in the main section.

Change to Adjustment User Interface

In this release, the Adjustment Maintenance page has been replaced by a portal / zone oriented adjustment maintenance page.

Note. Manual configuration is required to be able to fully use the new maintenance page.

To use the new page, your adjustment types must be configured with an appropriate business object that defines appropriate display and maintenance maps.

- The base product has supplied business objects with appropriate maps that may be used. See below for more detail.
- If your implementation has already defined business objects for your adjustment types for the purposes of defining special business rules or additional attributes, you will need to do some implementation work to ensure that these business objects have appropriate display and maintenance maps. See below for more detail.

If your implementation determines that you want to continue using the original adjustment maintenance pages, you should refer to the following steps:

- **General characteristic collection.** With the use of BOs and the portal / zone user interface, the recommended design for including characteristics in a business object is to "flatten" and design a UI map that provides an appropriate label for the field. Generic characteristic collections are not recommended for usability reasons. However, because the previous adjustment user interface supported the generic characteristics list, the product provides business objects that include the generic characteristics collection.
- **Search for foreign key characteristics.** Note that to be able to search on characteristics in a UI map, the foreign key reference for any foreign key characteristics must have an appropriate search zone defined. As mentioned in Several Searches Provided for UI Map Searching several new search zones have been supplied in base for existing entities. If your adjustments are referring to other foreign keys that do not have search zones defined and these characteristics must be maintained on the adjustment page, new search zones must be defined to enable searching.

Base Product Adjustment Business Objects

The base product provides the following business objects:

- Standard Adjustment (C1-GenericAdjustment). This is expected to be used for most adjustments that are not assessments. It supports the standard adjustment fields and approval and its generation logic assumes that it is not an assessment (not an FT header). It doesn't

include characteristics and may be used as a basis for a business object with "flattened" characteristics.

- Standard Adjustment with Characteristics (C1-GenericAdjustmentChars). This is provided for upgrade purposes. It is a version of the Standard Adjustment BO but includes the generic characteristic collection.
- Assessment Adjustment (C1-AssessmentAdjustment). This is similar to the Standard Adjustment BO except that it has a special generation logic that configures the record as an assessment adjustment (i.e. that it is an FT header). It doesn't include characteristics and may be used as a basis for a business object with "flattened" characteristics.
- Assessment Adjustment with Characteristics (C1-AssessmentAdjustmentChars). This is provided for upgrade purposes. It is a version of the Assessment Adjustment BO but includes the generic characteristic collection.
- Transfer Adjustment (C1-TransferAdjustment). This is configured for the pair of transfer adjustments. The UI map display logic provided for this BO retrieve both adjustments that are part of the transfer and show the "source" adjustment first and the "target" adjustment second. It doesn't include characteristics and may be used as a basis for a business object with "flattened" characteristics.
- Transfer Adjustment with Characteristics (C1-TransferAdjustmentChars). This is provided for upgrade purposes. It is a version of the Transfer Adjustment BO but includes the generic characteristic collection.
- A/P Request Adjustment (C1-APRequestAdjustment). This is configured to support the specific attributes required for A/P adjustments. It doesn't include characteristics and may be used as a basis for a business object with "flattened" characteristics.
- A/P Request Adjustment with Characteristics (C1-APRequestAdjustmentChars). This is provided for upgrade purposes. It is a version of the A/P Request Adjustment BO but includes the generic characteristic collection.

Continuing to Use Original User Interface

If your implementation determines that you want to continue using the original adjustment maintenance pages the product provides a script to run to update the system's navigation option records to the original navigation keys.

- The script is called **Downgrade Menu Scripts.txt** and is found in the database package in a folder called Optional Scripts within the Database folder.

It is possible that your implementation would like to use the new portals, but requires some time to update training materials and retrain your users. The assumption is that your implementation uses the above script to continue using the original user interface until such time that you are ready to upgrade to the newly released user interfaces. The product provides a separate script to reinstate the new navigation found in the same location listed above.

- The script is called **Upgrade Menu Scripts.txt** and is found in the same location on your server.

> **Note:** After running either of these scripts, the server must be restarted in order for the update to take effect.

New Adjustment Creation Reason

In this release adjustment has been enhanced to allow the definition of a creation reason. This is an optional field and is useful for manually created adjustments.

The list of valid adjustment creation reasons are defined by your implementation using an extended lookup with the **Adjustment Creation Reason** business object.

Refer to the online help for more information about configuring adjustment creation reasons.

The existing base adjustment information plug-ins for Installation (C1-ADI-INFO) and Adjustment Type (C1-ADT-INFO) have been enhanced to include this as one of the fields to select.

In addition, the product has provided a new version of the base, default adjustment information string used when no plug-in is available. Refer to Appendix A in the *Oracle Enterprise Taxation and Policy Management Database Administrator's Guide* for more information on configuring the Adjustment FK reference to use the new default adjustment information string.

New Transfer Adjustment Flag

In previous releases when transferring an amount (debit or credit) from one obligation to another, the product created two adjustments and linked them to each other. However, there was no record of which obligation originated the transfer.

In this release the product introduces a Transfer Role flag. When creating a new Transfer Adjustment, the appropriate values of **Source** and **Target** are added to the two adjustments created as part of the transfer. The following are some additional points regarding this change:

- The existing base adjustment information plug-ins for Installation (C1-ADI-INFO) and Adjustment Type (C1-ADT-INFO) have been enhanced to include this as one of the fields to select.
- The Account Financial History page, the Account Financial History zone on Control Central and the Obligation Financial History page were also changed to explicitly state the value of the Transfer Role when displaying transfer adjustments.
- The new Transfer Adjustment business objects include this new value when displaying an existing pair of transfer adjustments. The original legacy adjustment page has not been updated to display this detail, however, if does display the information string, so if you have updated that to display the new field, it is visible.

New Multiple Adjustments Transactions

In this release two new transactions have been introduced that allow a user to view, create or cancel one or more adjustments:

- The Multiple Miscellaneous Adjustments transaction allows a user to view, cancel or create adjustments for a selected obligation or assessment where the adjustment type's category is **Manual Adjustment.**
- The Multiple P&I Adjustments transaction allows a user to view, cancel or create adjustments for a selected obligation or assessment where the adjustment type's category is **Manual P&I.**

Refer to the online help for more information.

Change to Add Waiver Dialogue

In previous releases, when attempting to add a waiver, the dialogue navigated to Control Central prompting the user to choose the correct account.

In this release the Waiver add dialogue has been changed to eliminate the navigation to control central. The user is instead shown a dialogue prompting for the Account Id and the Waiver Type. If there is already an account in context, it is defaulted. The user can use an account search to select an appropriate account, if necessary. After verifying the account and waiver type, the user proceeds as before to the UI map that displays the additional waiver details to enter based on the waiver type.

Change to Add Overpayment Dialogue

In previous releases, when attempting to add an overpayment process, the dialogue navigated to Control Central prompting the user to choose the correct account.

I this release the Overpayment Process add dialogue has been changed to eliminate the navigation to control central. The user is instead shown a dialogue prompting for the Account, Obligation and the Overpayment Process Type. If there is already an account in context, it is defaulted. The user can use an account search to select an appropriate account, if necessary. After verifying the account, obligation and overpayment process type, the user proceeds as before to the UI map that displays the additional overpayment process details to enter based on the overpayment process type.

Payment Processing Enhancements

Support for International Bank Account Number

In this release, a new auto pay source account validation algorithm has been supplied to validate an International Bank Account Number (IBAN).

Refer to the algorithm type C1-VALIBAN for details related to the validation logic.

Application Security Enhancements

In addition to several application framework security enhancements (documented separately), the following enhancements were done.

Product Specific User Information Moved

The User fields Show All Premises checkbox and the default Tender Source are not required by all products but are applicable to this product. In previous releases the elements were visible on the User - Main tab using special java script.

In this release the main tab has been enhanced to no longer display this data and instead a special new tab has been provided on User - Miscellaneous. The Miscellaneous tab is a new style zone-based tab and allows our product to customize the User page per the product requirements. The default Tender Source and the checkbox (renamed Show All Locations) have been moved there. The product provides a special business object for the User maintenance object to support the definition of the maps used to display and maintain the Tender Source and the Show All Locations checkbox.

This new tab also allows an implementation to customize the information shown on User by introducing additional zones.

System Data Details

Refer to Appendix A in the *Oracle Enterprise Taxation and Policy Management Database Administrator's Guide* for information related to system data, including:

- New system data
- Notable changes to existing system data and descriptions of their potential impact
- System data no longer supported
- Information about planned system data deprecation in a future release

Note to security administrators. The list of new application services or additional access modes on existing application services are listed in the database upgrade guide.

Functionality Deprecation

Web Self Service Legacy Functionality

In previous releases the product provided sample web pages and corresponding XAI inbound services for supporting basic web self service functionality. These legacy components are no longer supported going forward.

Planned Functionality Deprecation

Obligation Start Options

The Obligation Start Option functionality will be deprecated in a future release. This includes the Obligation Type Start Option and Obligation Type Start Option Merge administrative pages as well as the ability to change a start option on the Obligation page.

Obligation Contract Quantity / Contract Terms

The Contract Quantity and Contract Term functionality on Obligation will be deprecated in a future release. This includes support for defining Contract Values, Contract Riders and Tax Exemption data.

Enhancements in Oracle Utilities Application Framework

Security Enhancements

The products that use the Oracle Utilities Application Framework require various levels of security. Each release of the Oracle Utilities Application Framework implements new or updated flexible levels of security. Implementations can configure and implement additional security or link into external security products for greater control.

Security Cache Changes

The Oracle Utilities Application Framework web application server keeps a cache of user/application service security information in order to enhance performance. The lifetime of an entry in the cache is until midnight system time or 30 minutes, whichever is shorter. The default cache time is now much shorter, changing it to 1 minute, so that changes to a user's security information propagate more rapidly.

Note: This is an internal tolerance and is not customizable.

Login ID Support

With the advent of Single Sign On (SSO) solutions and greater flexibility of security credentials in the marketplace, the Oracle Utilities Application Framework eight (8) character User ID limit was fast becoming a restriction.

To address this, an alias has been added, known as Login ID, on the User object. The Login ID supports user identifiers up to 256 characters in length. The Login ID is now used for authentication, where the preexisting User ID (still restricted to 8 characters for backward compatibility) is now used for authorization.

The Login Id allows the following to be implemented:

- The Login ID can default to the same value as the User ID for backward compatibility.
- The Login ID can be changed at any time, by an authorized user, without affecting audit information.
- The Login ID can be provisioned from a third party user provisioning engine like Oracle Identity Manager or similar.
- Customers can choose to autogenerate User IDs from Login IDs using class extensions or use the third party provisioning engine to generate User IDs (as in Oracle Identity Manager).

For more information on this enhancement and general security facilities, refer to the Oracle Utilities Application Framework Security Overview whitepaper available on My Oracle Support at KB Id: 773473.1.

Business Service Security

Business services currently have no security of their own as they inherit the security of the underlying Application Service. In some cases, this was perceived a restriction when different Business Services were based upon the same application service.

It is now possible to add security definitions to business services and service scripts. All business services and service scripts are required to have an application service specified as a basis for security.

User Propagation to Database

In the past, database administrators found it difficult to ascertain which end user was using a particular database connection. For performance purposes, all database connections are shared and pooled for maximum reuse.

It is now possible to automatically identify the User ID of the end user using an active connection to the database using the CLIENT_IDENTIFIER functionality built into the Oracle database connectivity API.

Note: This solution only applies to sites using Oracle database v10 and above.

This allows implementations to identify end users on active database connections and also link into additional Oracle security products that support the CLIENT_IDENTIFIER functionality.

Security Product Integration

As part our ongoing commitment to enhancing security from requirements from the market each release of the Oracle Utilities Application Framework enhances its security capabilities by allowing additional security products to be used with the product. The following summarizes some of the additional products that can be used to augment the security features of the framework:

- Oracle DB Transparent Data Encryption - This allows customers use TDE to encrypt the physical data files to protect backups from unauthorized use.
- Oracle Identity Manager - Allows user and user groups to be provisioned from Oracle Identity Manager to allow customers to centrally manage user repositories from Oracle Identity Manager. For more information on this enhancement refer to the Oracle Identity Manager Integration Overview available from My Oracle Support at KB Id: 970785.1. This interface is also available in the latest Service Pack for Oracle Utilities Application Framework V2.2.
- Audit Vault - Whilst there is an audit feature inbuilt into the Oracle Utilities Application Framework it is possible to use the Audit Vault database option to record audit information at the database level. To use this feature the Audit Vault option must be licensed, installed, enabled and configured to capture the appropriate information against the product database.
- Database Vault - The Oracle Utilities Application Framework now ships with optional additional installation files to enable a default Database Vault solution for the product. This restricts system and DBA accounts to appropriate access to product data. By default, the system users in Oracle (i.e. the SYS and SYSTEM user), DBA users (SPLADM/CISADM) and any user with the SYSDBA role has full access to the application data. Whilst, this is generally acceptable for most sites, some sites have considered this a potential security issue. These particular sites wish to use an option for the Oracle database called Database Vault that allows additional security to be defined to restrict system and DBA users to their allocated tasks. A new default set of configuration files for Database Vault allows restriction of Data Manipulation Language (DML) access to the product data for system and DBA users whilst allowing appropriate access to Data Definition Language (DDL) and Data Control Language (DCL). Customers wishing to use this facility must license and enable the Database Vault option on the Oracle Database prior to enabling the Database Vault product solution provided.

Recreate Application Service Page

One of the features of the product is to allow the definitions of authorization privileges within the security model. Whilst the original maintenance screens are sufficient for maintaining that information, some customers wanted them improved. A redesigned Application Security portal has been added to optimize the definition and maintenance of permissions to specific user groups.

The portal allows security administrators the ability to identify which user groups have access rights to a particular service, and if a user has access to a particular action or a transaction.

Audit on Inquiry

It is now possible to add an Audit Service Script to zone types to capture query information to add to audit records for zones (including base zones). The audit facility can be set on the Zone.

Encrypted Passwords in Configuration Files

In past releases of the Oracle Utilities Application Framework, passwords for internal administration processes have been stored in some configuration files in plain text format. This represented a potential security risk, even though the configuration files were protected by the operating system security.

To mitigate any security issues all passwords are now encrypted using AES-128 for greater levels of security. This enhancement is also available as a part the latest service pack for Oracle Utilities Application Framework V2.2.

Removal of Security based browser cookie

By default, the security credentials for the user were held as a session cookie that is automatically generated by the J2EE Web Application Server. While session cookies are secure they are not considered appropriate for holding credentials. For greater levels of security, credentials are no longer held in the session cookie but in browser memory as part of a standard J2EE security call.

> **Note:** The browser session cookie is still available but now only holds the active language code used by the end user to support multi-lingual implementations.

Addressed Security Vulnerabilities

With every release of the product, the security facilities within the product are enhanced to address new and specific identified potential security vulnerabilities from customer security assessments and internal assessments.

These enhancements include addressing cross scripting vulnerabilities, SQL injection and internal information display. The valid statements that are available in scripting is now controlled by a product whitelist. Additionally the comments in the generated screens can now be stripped to prevent display of internal information that is typically used by developers but not necessary for runtime use.

For more information, see Fortify assessments for the product.

This enhancement is also available as a part the latest service pack for Oracle Utilities Application Framework V2.2.

User Enable

One of the limitations of the user object was that you cannot delete a user that has been used. This is enforced to maintain audit information that is captured by the product. A User Enable flag has been added to the user object, thus allowing a user to be logically deleted but retain the information for that user to satisfy audit purposes. The user record is still retained in the product but cannot be used for any active processing.

Implementations can use this flag to mark user records as inactive for user retrenchments or temporary contractor workers. From an authentication purposes only active users will be allowed to authenticate successfully or execute any object within the product.

> **Note:** The ability to enable and disable users can be controlled using Enable/ Disable Access Mode on the CILTUSEP application service.

Time Zone Support

For some product implementations recording the time zone in which a user resides is important for processing date and time dependent data (for example, for work crew information). The product now allows the time zone for a user to be recorded against the user object to allow functionality to use that information.

JAAS Support in XAI

Internally the Web Services component uses a callback to the **classicxai** servlet to verify Web Services security against the Oracle Utilities Application Framework security model. In accordance with security standards, a JAAS based call has been implemented to replace this callback.

The JAAS implementation is used for internal communications only but allows other components (such as JMX) to be also secured internally.

For more information on this enhancement, refer to the XAI Best Practices whitepaper available on My Oracle Support at KB Id: 942074.1.

Support for Effective User in XAI

In interfacing using SOA, some implementation use an integration agent approach where the agent uses different security credentials from those required from the product.

It is now possible to specify an effectiverUser and/or effectiveUserid in the SOAP header to provide mapping credentials for use in XAI. This enhancement also allows for a definition of which privileged users can use this enhancement with to complete the security definition.

For more information on this enhancement refer to the XAI Best Practices whitepaper available on My Oracle Support at KB Id: 942074.1.

Database Patch Permissions

Some implementations prefer running Database Upgrade or Patch utilities as non-schema owner and non-system account for site security policy reasons. A new feature configuration has been added enable sites to run these utilities without using system account.

To use this facility, the utility scripts will use a preconfigured Feature configuration that stores the schema username/password and then connect to the database using these credentials. As with other passwords in the product the database password is saved in encrypted format in the framework database tables and it is be displayed on the screen as masked.

Debug Mode Security Controlled

The Oracle Utilities Application Framework allows an end user to enter debug mode to display additional support information to logs to be used by developers and support personnel. As long as the end user has access to the system they can use debug mode to assist support personnel.

The use of debug mode is now restricted to authorized users only using the F1DEBUG security group.

Cache Management Security Controlled

Typically the online server cache is automatically managed by the Oracle Utilities Application Framework but a number of additional utilities were provided to manually manage the contents of the cache. This was primarily used by developers and testers in their activities. As with Debug mode this facility was open to any valid user of the product. While this was feature was not destructive, it was decided to add similar security controls as provided with the debug mode.

The use of cache management utilities is now restricted to authorized users only using the F1ADMIN security group.

> **Note:** This facility is provided for backward compatibility and for developers as it is expected that customers will use the JMX facilities to control the cache.

Logoff Support

It is now possible to logoff the browser session explicitly in additional to closing the browser session to terminate the session. The logoff button will return to the logon screen.

User Identification

The name of the user is clearly identified at the top of the logon screen in line with Fusion and Oracle standards.

Framework Now Tested Using Fortify

Oracle requires all products to be tested for security violations using the Fortify product according to Oracle Secure Programming practices. All Oracle Utilities Application Framework based products are tested using the Fortify product as per Oracle security guidelines.

Plain Text passwords are not supported in API

As per Oracle Security guidelines, the utility to encrypt passwords will no longer accept passwords in plain text as part of a command invocation. Input of passwords is only supported in interactive mode.

LDAP Import is now able to be scheduled

In past releases, the LDAP Import function was initiated online to interactively import user records from an LDAP source into the security model on a regular basis. Whilst this was sufficient for some sites, most sites wish to regularly schedule synchronization in the background, especially for large numbers of users. It is now possible to schedule the LDAP import via a new job that takes the location of the LDAP, credentials; mapping file and import filter as parameters to execute the job with. The existing online version of the LDAP import will be retained in the short term for backward compatibility and as a test bed for the mapping and import filter prior to executing this new job.

> **Note:** Deletions of users will not result of deletion of user records. Deletions will disable users using the new "User Enable" facility.
>
> **Note:** The MPL based online based LDAP synchronization facility will be supported in the short term but customers using this facility should migrate to the LDAP batch job. MPL based import will be deprecated in a future release.

Individual Database Users Supported

In line with practices used other Oracle products, each mode of access has the ability to use the same or different database users. This technique allows implementers to assign different resource profiles at the database level for different modes of access. It is now possible to setup individual database users for the following modes of access at installation/configuration time:

- Online
- Batch
- MPL (for products using the MPL)
- XAI

Passwords input in silent mode

In accordance with security standards outlined by Oracle security standards, input of passwords during the installation and configuration process will not be displayed on the screen (i.e. silent mode).

Individual file permissions

In previous versions of the product, file permissions were set at the global level for the environment. These are now fine grained permissions in accordance with Oracle Security policy.

Support for Document rendering within infrastructure

In past versions of the product, document rendering solutions were targeted to specific market solutions with specific infrastructure requirements. In this release, this infrastructure has been

made more generic to allow customers to implement a wider range of document rendering solutions including Oracle DocuMaker, Oracle Business Intelligence (BI) Publisher, Group 1 DOC 1 etc.

IP Address available for Algorithms

The audit facility within the framework allows registration of user credentials as part of the audit information captured. It is now possible to capture IP Address of the end user for use on the audit record (if desired). This feature also supports recording real and proxy IP addressed and proxy connections (if the proxy is configured to place the pre-proxy address in the request header context variable $REQUESTING-IP-ADDRESS).

> **Note:** To use this facility the base audit facility must be extended. Please refer to your product documentation to see if this has been enabled in your product.

Update to Oracle Identity Manager Support

In Oracle Utilities Application Framework V2.2, the integration of Oracle Identity Manager with Oracle Utilities Application Framework security was introduced. This releases adds integrated support for SPML and support for the latest version of the Oracle Identity Manager product.

Refer to Oracle Identity Manager Integration Overview whitepaper available from My Oracle Support at KB Id: 970785.1 for more details of this interface.

Generic User Portal

To support extensions to the authorization model, a generic user tab has been added to the user object to allow products and implementations to add specialist zones to display, modify or add additional information on the user object. This portal can be used by products to support security for specific market requirements as well as provide implementations for a means to provide customers with additional site specific security facilities.

Privacy Policy Redirect

In some markets the site must provide a privacy policy that can be accessed from the product and/or the logon screen. A standard redirect has been implemented to allow product groups and/or implementations to add a privacy screen to comply to site standards. The privacy policy can be in HTML format and must be located as cm/privacy.html which is then able to be accessed using the http://<host>:<port>/<server>/privacy URL.

Advanced Configurable Object Enhancements

In Oracle Utilities Application Framework V2.1 the concept of configurable objects was introduced. To help develop these objects a set of tools to help developers and customers create these objects was introduced. With each release of the Oracle Utilities Application Framework there are additional facilities added to enhance this capability.

Custom Search

It is now possible to add search capability to UI maps. Implementers should be able to build custom searches, using the oraSearch tag in UI maps similar to those available in explorer zones.

Update Portal Context from a Business Process Assistant

A BPA Script is now able to inquire the Portal Context and Global Context used by Explorer, UI Map, and other zones within a Portal. This will also allow the script to update the Portal Context.

Script Parameter Enhancement

Currently, the product allows specifying a parameter-based error message if a server script fails.Using the terminate with error script, the product can notify the user brief information of the server script error. In past releases, the product could use the XPath of the schema as parameter

but the information is always displayed as a string. For example, if the XPath is pointing to an element whose type is a date, the current functionality does not format it as a date rather display it in its raw ISO formation.

The message can now be formatted using the appropriate data-types.

ADF Zone Type

Oracle provides an Application Development Framework (ADF) as part of the Fusion direction across the product lines. In the long term all Oracle products will be built and execute using ADF. As part of that ongoing migration, components of ADF have been progressively added to the Oracle Utilities Application Framework based products. In past releases, the ADF XPath2 processing engine has been introduced; the ADF styles have been used within screens and the ADF color scheme/style sheets has been introduced for UI Maps.

It is now possible to build a UI using ADF and have that integrated into a zone and portal within the product line. A new zone type to enable ADF integration is available. This provides the means for products and implementers to add ADF components to zones. These components would also be able to interact with other zones in the portal.

> **Note:** ADF is currently only supported on Oracle WebLogic application server at the time of release. Therefore, this zone would not be available to users of other application servers. It is anticipated that ADF will be supported on other platforms in due course.

Status Reason Maintenance Object

When a Business Object defines a lifecycle there may be states that would require a reason to describe why the object is in that state. A new Maintenance Object has been added to hold that state information. This Maintenance Object would be a child of the existing Business Object Maintenance Object.

Help Override on Metadata Field

Designing generic portals with zones that look different per business object makes it difficult to rely on static online help for those portals.

Past release added hover text support for a zone element that takes its contents from an associated metadata Field's description. The latest release now allows implementers to customize that description.

Query and Multi-Query Zone Loading on Broadcast

In a portal, whenever the broadcast icon is clicked, all the explorer zones in the portal are reloaded, which also includes all the query zones. It is now possible that only the query and multi-query zones that contain one of the filter parameters being broadcast are reloaded. This potentially improves performance of complex multi-zone portals.

Ability for BPA to refresh Dashboard

With the introduction of the optimization of the zone refresh due to data change outlined in the previous enhancement, it may be desirable for a BPA script to force a refresh of the dashboard regardless if it is needed or not. A new script step type has been added to allow the BPA to force a refresh, if desired.

Rownum in Explorer Zones

In some query zones, some sites require to allow the number of records to be returned from a query to be specified as a parameter in the query criteria.

It is now possible to add "Number of Rows to return" to the SQL 1-10 parameters for use by the framework to impose a record limit on the query at runtime. If no limit is specified the query will assume unlimited. By setting this value sets the record limit specified on the JDBC driver for the individual SQL call.

> **Note:** This enhancement may not change the behavior of any queries that have lower hard coded values.

Revision Control

This feature allows version control of key configuration data entities used in Configurable Objects. This allows Configurable Objects developers to manage versions of their business objects, business services, service scripts, UI maps, data areas, etc., in a similar way that version control products work for code based approaches. Additional features of the product now allow a developer to check in, check out and restore versions of their objects as necessary. A number of base product key objects are enabled for revision control as part of each release.

This enhancement is also available as a part of the latest service pack for Oracle Utilities Application Framework V2.2.

For more information on this enhancement, refer to the Software Configuration Management - Version Management whitepaper available on My Oracle Support at KB Id: 560401.1.

Bundling

This feature allows versions of configurable objects to be exported from one environment and imported into another environment. This feature allows customers, developers and partners to deliver complete configuration object solutions as data exports to be loaded into customer environments. This feature works in conjunction with the Revision Control feature to allow an individual object to be included in a bundle at save/check in time or using a bundle maintenance facility.

This enhancement is also available as a part of the latest service pack for Oracle Utilities Application Framework V2.2.

For more information on this enhancement, refer to the Software Configuration Management - Revision Management whitepaper available on My Oracle Support at KB Id: 560401.1.

Bundle Maintenance Object Audit

As outlined in the previous section, Bundling functionality was introduced into the product.

A new feature in Bundling is the ability to identify the source of Bundle Entities in a Bundle Export for auditing purposes.

Script Search for Plug-Ins

With more and more plug-ins being written, the search for plug-in scripts by algorithm entity is beneficial for developers. A search capability was added to assist developers in identifying existing plug-in scripts.

Inhibit Row in Explorers

It is now possible to provide the ability to inhibit a row in an explorer zone based on a boolean value returned by a service script. This feature may be used to hide rows which contain information the user should not have read access to that needs to be controlled programmatically.

Explorer Help Icon

It is now possible add a help icon in explorer headings if there is field help behind the heading's metadata field. When clicked, the field help text will appear.

Display Algorithm Entity Description

It is now possible to make a detailed description easily viewable from Script and Algorithm type transactions by adding a link to it in Plug-In Scripts.

Performance Metadata Flags

The product is metadata driven with the metadata used for both development and runtime aspects of the product. Two new DB-table attributes have been introduced to help reduce unnecessary SQL calls, notably when running batch jobs where performance is critical.

The first attribute would enable the ability to configure when keys are validated by the product. This is used in scenarios where we know the key will be unique (such as log tables) and uniqueness will be enforced by the database only. This should reduce an extra SELECT statement when an entry is being inserted.

The second attribute would enable the ability to cache the specified table and reduce SELECT statements. These are tables that are guaranteed to not change throughout the batch job (e.g. currency codes will not change throughout the life of a batch run).

These performance features already exist in past releases, however, they are not configurable using metadata. These attributes are now configurable within metadata.

> **Note:** It is expected that these attributes are set by developers rather than configuration at an implementation.

Duration Datatype on UI Map

It is now possible enable the configuration of a new data type in UI Maps named duration. This would be a new data type representing a number of seconds and would be stored as an integer but shown in hours: minutes: seconds notation. For example, a duration value of 7687065 seconds would be displayed as 2,135:17:45.

Managed Content

The UI Map development provided a means by which implementers could design and store HTML maps for the product in a dynamic manner. This mechanism removed the need for the implementer to access the web server file structure to make their maps available to the application product. Other file types do not yet have this advantage.

An object is provided that may be used for the storage of different types of managed content (XSLTs, JavaScript libraries, whitelists, CSS libraries, etc.). These objects may then be manipulated in the same manner as UI Maps (HTML) including bundling and revision control.

Embedded Help Portal

A new portal called 'Embedded Help Authoring' is provided. The purpose of this portal is to provide an alternative method of authoring field level help that resides in the field meta-data. The portal will display all the MD fields from a particular UI Map schema. The MD field's information may be downloaded to a spreadsheet; where the Label, Override Label, Help Text and Override Help Text may be edited, based on the system owner, and uploaded back to update the changes.

Extendable Lookup

A new Maintenance Object was introduced to capture information from external applications. This Maintenance Object houses codes that are analogous to the existing Lookup feature, but with no limitation on size or attributes.

Advanced Debugging

The product currently provides a facility to debug and log the Advanced Configuration Environment objects written to implement business rules. The new debug facility enhances the debugging and the logging facility and to make the viewable log more specific to these programming objects debugging and easier to use. For example, object performance information is displayed as well as color coded data dumps to assist programmers in optimizing their code.

Phone Number Validation Service

A new specific business service (F1-PhoneNumberValidation) has been introduced to standardize the validation of a phone number based on a given format. This business service can be called from a Business Object Validation plug-in that validates a resource's various phone numbers.

Date Math Service

A new specific common business service (F1-DateMath) has been introduced that would allow conducting calculations using dates and time. Some example calculations would be adding days, adding times, or finding the duration between two dates.

CLOB on Child Tables

In past releases, Business Objects and Business Services only support XML/CLOB storage fields on the physical table associated with the top/root of the schema (e.g. the primary table of the Maintenance Object).

Business Object/Business Service child list elements now also support XML mappings to XML storage fields.

Configurable Zone Refresh

In past releases, zone refresh was automatic on change of any data. It is now possible to automatically refresh specific zones at a configurable interval to display the latest data and alerts. This specification (in seconds) is specified on the Portal definition of the zone. This allows specific zones to be refreshed as needed. This allows zones to be time related as well as data related.

Default Portal Zone Order

In past releases of the product, zone order was set on individual user record. It is now possible to provide a default sort sequence for zones in a portal, and still permit a user with appropriate permissions the ability to override that order.

User Override of Zone Refresh

It is now possible to allow user to override the refresh rate for portals to suit individual job needs on the Portal Preferences tab.

Dynamic Data Area Extension

Products and customers may find it convenient and useful to “extend” product owned data areas, such that everywhere the data area is used their additional fields will be available as well. It is now possible to accomplish this without the need to subclass the Business Object setup.

Lock Portal Preferences

In past versions of the product it was possible to change portal preferences at the user level (even though user templates were supported). While this is applicable to some implementations, it meant a higher level of maintenance. It is now possible to hide the portal off the user preferences screen to disallow individual end users the ability to change portal preferences. Besides hiding the portal preferences, this also allows configuration of a default zone order. In the past if the user didn't specifically configure preferences, the zones were shown in alphabetic order by description.

Support Popup Calendars on UI Maps

In past releases when generating a UI Map with a date or time field had limited validation capabilities (i.e. a validated input box). It is now possible to allow for the generation of a popup calendar and time picker widgets automatically for date and time fields.

Conversion To DITA Help Format

As part of the ongoing conversion of the product towards the Fusion framework, the online help has been converted from the proprietary Word based format to the industry standard DITA format. There are also a number of additional enhancements in displaying the help:

- Topics are now shown separately. In previous releases a full chapter of the help was displayed and users would scroll through topics within a chapter.
- Indexes are now grouped and separated by product.

Single State Business Object Lifecycle Support

During implementations there are business entities that do not follow any state transition but still need the ability for standard periodic monitoring. In order to leverage the state periodic monitoring rules these entities need to define a lifecycle. In past releases business object lifecycle requires initial as well as final states to be defined. It is possible to allow lifecycle definition of a single state.

Display Formatted Data from Plug-in

In the past the use of HTML tags was limited in UI Maps due to security concerns. It is now possible to allow the UI Map language to support HTML tags, directly or generated as part of a service script, to support advanced formatting but provide a sanitized implementation to minimize the possible of malicious code being introduced.

For example, you may wish to display a value in red if a complex condition is reached. The logic to determine if this condition can be written in a service script, which will output the HTML to set the colors correctly. While this feature allows this to happen it also checks that the HTML output is sanitized.

Ability to Disable MO, BO and BO Status Options

In past releases, it was possible to override options on MO, BO and BO Status objects with single value options. It is now possible to override multi-value options.

Overrides are also now displayed on the summary page with the text “Replace with …”.

Suppressing Columns in Explorer Zones

It is now possible to suppress individual specific columns within Explorer Zones. The columns that can now be suppressed are:

- Row Number Columns
- Individual columns suppressed when exporting to Excel
- Columns in a custom Search Popup

Real Time JMS Sender/Receiver

In the last few releases of the product a number of senders and receivers have been offered as real time to allow sites to implement real time business integration solutions. In past releases, the email and SMS sender/receivers have been made available for real time integration.

It is now possible to support real time integration to JMS resources such as JMS Queues and JMS Topics for any JMS compatible provider, via a real time JMS Sender and Receiver.

Table Classification Flag

A number of additional attributes have been added to the object metadata to allow classification of data for reference purposes. Each table in the product can now have an appropriate classification within metadata (Administration, Master, Transaction or unclassified (also variations of these values are supported)).

It is expected that products will deliver appropriate values for each of their products. By default Unclassified will be used for products not providing these values. Implementations are responsible for custom tables.

Master Data Synchronization

The product now supports a new Synchronization Business Object that allows multi-product Business Object/Maintenance Object synchronization. The synchronization specification is attached to the relevant Maintenance Object as options. The format of the synchronization data is included in the specification. The Oracle Utilities Application Framework uses purpose built adapters and the JMS based transport to send outgoing synchronization and process incoming synchronization messages for data synchronization. A set of portals are also available to monitor synchronizations and manage exceptions for incoming synchronizations.

Batch Statistics Portal

Every time a batch process is executed basic run information is stored for display on the Batch Run Tree. A new portal has been introduced, accessible from the batch run tree, to calculate and display basic statistics relating to batch execution. The object allows the site to document the statistics for future analysis.

Business Object Maintenance Usability Enhancements

With the popularity of Business Objects a number of enhancements have been implementation to allow development more flexibility and improve the Business Object development process. The enhancements that have been added in this release of the framework include:

- A "View Schema" option is now available from the Business Object General Information Zone.
- Removal of excessive use of whitespace from Business Object Summary Tab. The Business Object Summary Tab was
- If no lifecycle is available for the Business Object then the Lifecycle Display zone will display an appropriate message rather than using white space.
- If the Business Object does not include any options then the Options zone is optimized to reduce the use of whitespace.
- If the Business Object does not include any rules then the Rules zone is optimized to reduce the use of whitespace.
- The description of the option is now included in the Options zone rather than the foreign key reference.
- The order of the nodes in the Rules zone is now in order of invocation rather than alphabetic. For example the Enter nodes are listed before the Monitor nodes and the Exit nodes are listed last.
- A new zone has been added to list the Business Object Hierarchy for the developer.

Operational Enhancements

As with all Oracle technology one of the focus areas is to reduce IT Total Cost of Ownership and provide both flexible and powerful facilities for operations of the Oracle Utilities Application Framework based product.

Firefox Support

The framework supports Mozilla Firefox 3.5 and above.

> **Note:** This enhancement only covers screens rendered within the framework. Any customizations specific screen that contains Internet Explorer extensions hard coded will need to change manually.

Hijri Dates

It is now possible for a user to view and enter dates in the application in the Islamic Hijri Calendar format.

Real-Time Monitoring/Timed Jobs

The product provides a means for actively monitoring data changes in the system and acting on them. This should allow delivery of time-sensitive alerts, such as appointments, in an effective manner.

This feature allows implementers to code and configure jobs that are running continuously such as monitor processes.

Batch Categorization

It is now possible to add a categorization of the batch control for documentation purposes.

Time Zone Treatment in XAI

In past releases, XAI sends and expects date/time values in the local time of the server running the product. This may cause issues when communicating with systems that are not aware of the server time zone. The XSD date format is now supported (ISO 8601), therefore it is possible to add the GMT offset to the date/time stamps in XAI messages. This change is implemented at the edge of the system, in XAI, therefore internal process date processing remains intact.

Provisioning Performance Information

It is now possible to collect online performance information for monitoring against SLA. This information can be enabled or disabled using a JMX console and allows for summary information to be made available for analysis in CSV format. This will be a tool used by implementations to identify troublesome online transactions.

For more information on this enhancement refer to the Server Administration Guide provided with your product.

JMX Enablement

It is now possible to enable JMX Mbeans to monitor and manage the internal transactions of the product. This would allow customer IT operations staff to control the internal workings of the product from a separate JMX compatible console rather than from the browser. This release allows cache control from a JMX console.

For each tier the following can be managed or queried:

COMPONENT	JMX COMPONENTS
Web Application Server	**Flushbean** - Manage online cache (replacement for flush JSP utilities) **JVMSystem** - Java Classloading, Memory, Operating System, JVM and Thread information
Business Application Server	**Performance Information** - Provision of performance information
Batch Framework (available in V2.2 latest SP)	**Batch Job** - Batch Job Information **Batch Process** - Thread information (including cancelling of jobs)

For more information on this enhancement refer to the Server Administration Guide provided with your product.

Multiple Product Install

It is possible to support installing multiple optional products in parallel on top of an existing product. There is also the potential that new future products will be designed as optional, allowing multiple applications to be installed in parallel directly on top of Oracle Utilities Application Framework.

> **Note:** This feature is designed to be used with specific products only.

Meeting Accessibility Standards II (ADA Compliance)

Previous versions of the product introduced some features allowing users with disabilities to navigate and use the system. With this release, more emphasis is placed on enhancing context information, markup and labeling to allow improved integration with external readers.

> **Note:** This is an ongoing project, and some lower priority, less critical items may only be covered in subsequent releases.

Holiday Dates

In past releases the product treated holidays on a work calendar as beginning at midnight and ending at midnight. This new release adds the ability to specify holidays' start and end dates and times. For example, the system should allow setting a holiday to begin at 5:00 PM of the previous day.

Batch Framework Enhancement

The batch framework has been enhanced to improve its stability by embedding a limited-use copy of Oracle Coherence to support Clustered Batch nodes. This improves the awareness between worker and submitter nodes as well as eliminates the reliance on database response times when it comes to the worker nodes' leasing mechanism.

This enhancement is also available for Oracle Utilities Application Framework V2.2 in the latest service pack.

For more information on this enhancement refer to the Batch Server Administration Guide provided with your product or Batch Best Practices whitepaper available on My Oracle Support at KB Id: 836362.1.

Externalization of the Configuration Settings

It is now possible to allow key product configuration files to be located outside of the EAR/WAR file. This feature allows technical configuration to be performed outside the product and not

require a rebuild and redeployment. For example, the database password can be maintained outside the application itself and changed without a potentially lengthy rebuild and redeployment process. This will also allow the product to support clustering in s more simpler fashion.

This enhancement is also available for Oracle Utilities Application Framework V2.2 in the latest service pack.

Support for Clustered Batch Model

A clustered model for batch using customizable thread-pools and worker threads is now available. The facility can be configured with a combination of dedicated batch thread-pools and threads for individual jobs at a configuration level for maximum flexibility. This facility can be used externally by a third party job scheduler or within the online daemon. The thread-pools and individual threads can be monitored using external JMX consoles.

This enhancement is related to the "Batch Framework Enhancement".

This enhancement is also available for Oracle Utilities Application Framework V2.2 in the latest service pack.

For more information on this enhancement refer to the Batch Server Administration Guide provided with your product or Batch Best Practices whitepaper available on My Oracle Support at KB Id: 836362.1.

Support for Custom JDBC Connection Information

The configuration of the database now use a custom formatted JDBC connection string following the conventions of the JDBC standard. This allows the customer to use advanced facilities in JDBC drivers such as RAC support and use of the thick or thin driver for use in the implementations.

For more information on this enhancement refer to the Server Administration Guide provided with your product.

Support for Oracle Real Application Clustering Fast Connection Failover

In the past releases of the product, Oracle Real Application Clustering (RAC) technology was supported but not all the available features for high availability were supported. RAC Fast Connection Failover (FCF) is now natively supported through configuration specific settings.

For more information on this enhancement refer to the Server Administration Guide provided with your product.

Rationalization of Utilities

With each installation of the product a number of management utilities are provided to manage the configuration and operation of the product. With each release of the product these utilities are modified to provide additional functionality. The following major changes have been implemented in this release:

- Configuration of the environment includes environmental and advanced setting configuration settings.
- The configuration utilities to generate configuration files, build WAR/EAR files and deploy them to the J2EE Web Application Server have been combined into a single utility for ease of use.
- Duplicate and unused configuration variables and environment variables have been removed to provide an optimize set of configuration settings and environment settings.

Custom Template Support

By default, the configuration utilities will generate configuration files and utilities using product provided templates. While this is sufficient for most needs, it is now possible to substitute site

specific custom templates for advanced configuration. This allows customers to take advantage of advanced features of related infrastructure whilst retaining these advanced facilities across upgrades.

For more information on this enhancement refer to the Server Administration Guide provided with your product.

Oracle WebLogic Expanded Mode support

By default, the Web Application Server and Business Application Server are deployed using J2EE standard WAR/EAR files. It is now possible to use the file system directly and support an expanded archive instead. This feature is ideal for developers and demonstration purposes.

Fine Grained configuration settings for JVM

In previous releases of the product, the JVM memory and options were dictated by template files. It is now possible for the site to configure specific custom memory settings and java options for each component of the architecture.

For more information on this enhancement refer to the Server Administration Guide provided with your product.

Support for Multiple JVM versions and vendors

In the past the Java version and java vendors that was supported was dictated by support that Micro Focus COBOL has for the versions and vendors. In Oracle Utilities Application Framework V4 it is possible to deploy more than one version of the java and vendor JVM for online, batch and COBOL (if used).

For more information on this enhancement refer to the Server Administration Guide provided with your product.

Customizable Server Context

In past releases of the product, the Web Applications were deployed to the root or a set context (for example, SPLApp). It is now possible to support custom contexts to support custom URL's and support multiple installations on a single J2EE Web Application Server instance.

For more information on this enhancement refer to the Server Administration Guide provided with your product.

Replacement of UCP for connection pooling

In past releases of the product, c3p0 was used for database connection pooling. This component has been replaced with Oracle's Universal Connection Pool (UCP) product which provides more advanced pooling facilities and support for Oracle RAC facilities.

Support for Coherence Production/Development Modes

Oracle Coherence is used by the batch component of the Oracle Utilities Application Framework to support CLUSTERED thread-pools. There is a new facility within Coherence which allows Coherence to run in either development or production modes. This allows the operations of the batch execution governed by Coherence to behave differently depending on the role of the environment. The facilities for both modes are identical but in development mode the clustering facilities within Coherence are limited to prevent development clusters to join production clusters. The new facility is provided via a configurations setting that sets the appropriate mode for the environment.

Other Enhancements

With each release of the Oracle Utilities Application Framework additional functionality is provided to provide flexible implementation options.

New Fusion UI Skin

The User Interface has been updated to conform to the Fusion look and feel, in line with Oracle's Fusion directions. This interface is now the default for all products migrating to this version. The features of the new user interface are as follows:

- Format and layout combines the existing layout within a Fusion look and feel. This is to reduce the effort required for existing customers to upgrade and take advantage of the new user interface whilst introducing them to Fusion.
- The button toolbar has been enhanced as per Fusion standards:
  - Dedicated buttons for navigation to Control Central, Account Information, and To Do have been removed. The Favorite Links dashboard zone can support similar functionality.
  - The Current To Do button has been removed. The Current To Do dashboard zone can support similar functionality.
  - The BPA Scripts button has been removed. The Favorite Scripts dashboard zone has been enhanced, with a Search function, to support similar functionality.
- The Fusion styles and colors have been adopted.
- The graphics and logos are a combination of Fusion standards and existing graphics.
- Portals and Zones have adopted a Fusion like feel.

Support for Java 6

The product now supports Java 6 (both 32 bit and 64 bit). The JVM's from Oracle, IBM and HP are supported. Refer to the Installation Guide for your product for exact versions and editions supported.

Geocoding Services (Address, Conversion to Lat/Long)

The ability to geocode addresses into return Latitude/Longitude values via Oracle Locator/Spatial has been introduced.

> **Note:** Whilst this facility is enabled within the framework, it may not be enabled in all products. Refer to the product installation guide for more details.

Short Message Service (SMS) Support

The ability to send as well as receive and process SMS messages from a common component has been introduced. The site requires a SMS gateway to complete the solution. In the initial release the following gateways are supported:

- Oracle BPEL SMS Gateway (default)
- Mobile Provider Email Gateway
- Third Party SMS gateway Aggregator
- Local SMS Gateway (e.g. Kannell)
- Direct Access (smslib)

Time zone/Time shift

In past releases, the seasonal time-shift support in the product did not include treatment for date/time values in Java-implemented services or values in CLOBs.

The Time Zone and Seasonal Time Shift support has now been enhanced. This allows the preservation of the consistent time treatment within the business logic layer where each time value is normalized to be in the server's time zone.

Bad Character Elimination in Free Text Fields

When copying text from an external source into a free text area in a product screen, special characters would be included in the text (such as formatting) which can cause processing issues in objects accessing that data. If any special characters are encountered as part of the paste operation they are now converted to standard characters to prevent unwanted special characters.

Request and Request Type

It is now possible to process business processes in batch based on certain conditions. One sample business process is to send an email to all role users for counts of To Dos beneath a To Do Type that are not complete and older than 'X' days since the create date. Two new maintenance objects: Request Type and Request have been introduced to allow implementations to permit this functionality. Request Type would be used to hold request type details. Request, on the other, would contain entries for every business process that a user initiated.

> **Note:** For Oracle Utilities Customer Care And Billing (V2.2 and above) and Oracle Enterprise Taxation Management (V2.2 and above) sites, this facility is similar to Sample and Submit.

BI Publisher Reporting with CLOB Data

In past releases of product, XML documents may be stored in CLOB fields as a whole. However, third party reporting applications may need to query against specific fields in these documents. In Oracle Utilities Application Framework it is possible for third party business reporting applications to query against specific XML data stored in CLOBS.

Support Custom Exception Handlers for To Do Creation

It is now possible for implementers to implement script or java code exception handlers to generate To Do entries on a more flexible number of business events.

OLTP Dropdown Configuration View

It is now possible to append the value of a dropdown to its displayed text when debugging. This should allow implementers using the configuration tools to see the info string followed by the code that is associated with it.

Support Batch Add

One of the principals of the product is that no matter the channel of access the validation within an object is performed. Whilst this is ideal for most situations there are data situation where a minimal validation path is acceptable. A new batch API has been added to minimize the validation for data objects and allow inserts to be performed quickly. This is known as “Batch Add” and is targeted at batch programs that have to perform large amounts of insert action.

> **Note:** Validation is still performed before the data is used. It is simply deferred until a more appropriate time.

General Process Table Support

In some situations it is desirable to create a list of transaction keys to process in a specific batch run later in the lifecycle. A generic Maintenance object F1-GENPROC has been added to allow products and implementation seed a list of transaction identifiers for a particular background process.

Batch Scheduled Cache Flush support

By default, the online data caches can be managed using a JSP or via a JMX console. It is now possible to schedule the cache reset for batch server caches using the background process F1-FLUSH. This allows developers and IT operations to initiate refresh of the static data cache for long running batch thread pools.

Oracle Policy Automation (OPA) Integration

The Oracle Policy Automation products allows customers to take policy documents in selected formats (Word and Excel are two examples) and generate rule sets for decision making. These rule sets can reside in the OPA server and are accessible via a Web Services. This enhancement supports the import of OPA based Web Services WSDL files that are generated into configurable "mapped" objects that can be called from the product as part of a new business service used in customization. The output of the OPA call is a decision based upon the data passed to the OPA service as well as a decision report that can be stored for future reference.

Miscellaneous Technical changes

As new changes are added to the product the utilities and infrastructure shipped with the product changes. Below is a summary of the utilities and infrastructure changes included in the latest release:

- The configureEnv utility now includes a -g option to allow configuration of ALL options in one flow rather than in multiple options. For backward compatibility multiple options will be still provided along with this option.
- The product logon page (jsp) is now a configurable option from the menu. Custom configuration of the logon page was always supported but was not available as configuration entry. This feature will be used by the intended Oracle Access Manager integration.
- Custom template support has been enhanced to allow customers to implement user exit for specific configurations setting rather than replacing templates. This feature was available at the product level but now support has been added for custom user exits.
- The patching utilities supplied with each fix will now be supplied with the products rather than each fix. Single fixes will only contain files and data used by the utilities.
- The default J2EE Authorization group, cisusers, is now a configuration option. This option was always able to be changed but was not a configuration option in the installation process.
- Compression and Secure Files are now supported from the product database installer. In the past these were post installation options.
- Oracle Identity Manager and Oracle Access Manager specific settings have been added to allow products to set additional values.
- HTTPS support is now universal for all access, if desired, as an installation option. In the past this was a post installation configuration. This extends to the utilities shipped with the product.
- Additional utility options are available to allow IBM WebSphere to support multi-tiered installation. For example, it is now possible to deploy the Business Application Server from the command line separately from the Web Application Server. In the past this was only possible from the IBM WebSphere administration console.
- Permissions on individual files within the product installation structure now conforms to Oracle Secure Coding Practice standards and is consistent with other Oracle products. In the past a generic set of operating system permission were used.
- The single fix and service pack process now adds additional auditing information to the installed_fixes.txt file to support re-installation and provide support with additional information about fixes that have been installed at the customer environment.

With the support for additional document rendering technologies, the infrastructure (environment variables and installation options) have been made generic to support a wide range of products.

Known Issues in Oracle Enterprise Taxation and Policy Management

This section describes known issues in Oracle Enterprise Taxation and Policy Management version 2.3.0. Patches for these issues will be released at a later date.

Firefox Browser Support:

Time picker display is partly covered for a group line when creating a form type.
(Bug Number 11704633)

Financials:

No log entry is created to indicate that validation was overridden when an appeal with issues detected is manually transitioned to the Ready For Review state. The issue happens on appeals with appeal types that use the Business Object Status - Enter algorithm "Appeal - Clear Issues List" (C1-AP-CLISLS). (Bug Number 11778473)

Suppression:

A suppression that has been open for longer than the maximum duration days specified on the suppression type is not expired if the suppression has been open for one month or longer. The issue happens for suppressions with suppression types that use the Business Object Status - Monitor algorithm type "Suppression - Maximum Duration Period Has Been Exceeded" (C1-SUPP-MAXD). (Bug Number 11781663)

The suppressed entities grid on the maintenance UI map does not show the appropriate info string next to the selected objects. (Bug Number 11669760)

Forms:

For a taxpayer without an account, posting a tax form with a form type that specifies "Optional" pre-registration results in an "Account not found" issue detected. The issue happens for forms for which the form types use the Form Rule Business Object - Apply Rule algorithm type "Check Taxpayer Existence" (C1-FR-CHTXEX). The work-around is to leave Pre-registration on the form type blank. (Bug Number 11736761)

Values of standard line elements of a group line within a recurring section are not saved.
(Bug Number 11773217)

Other:

Instances of business objects, e.g., tax forms based on a tax form business object, can be saved when values are not provided (left blank) for elements configured as required for the status that the business object instance is in. Validation works as expected on entry into state. (Bug Number 10419846)

XAI calls fail for services for which audit on inquiry enabled.
(Bug Number 10391114)

De-Supported Platforms

The following platforms are not supported by this version of Oracle Enterprise Taxation and Policy Management:

- AIX 5.x
- AIX 6.x 32-bit
- HP-UX 11.23
- HP-UX 11.31 Itanium
- Windows 2003 Server
- WebSphere 6.x
- Oracle Application Server
- Tomcat
- Microsoft SQL Server

Note: Support for DB2 on z/OS is dropped for all new customers.

Appendix A

Application Module Assignment

A single Menu Item is often associated with more than one module.

Module	Menu	Menu Items
Foundation	Admin	Account Staging
		Activity Type
		Alert Type
		Case Type
		Customer Contact Class
		Customer Contact Type
		DB Instruction
		DB Process
		Difference Query
		Filing Calendar
		Letter Template
		Process Flow Type
		Root Object
Foundation	Main	Case
		Customer Contact
		Process Flow
		XAI Download Staging
		XAI Dynamic Upload
Registration	Admin	Account Management Group
		Account Relationship Type
		Account Type
		Accounting Calendar

Module	Menu	Menu Items
		Contract Quantity Type
		Division
		General Ledger Division
		Identifier Type
		Industry Code
		Location Type
		Obligation Type
		Obligation Type Start Option
		Obligation Type Start Option Merge
		Person Relationship Type
		Person Type
		Postal Code Default
		Tax Exempt Type
		Tax Type
		Terms and Conditions
Registration	Main	Account
		Account / Person Replicator
		Location
		Location Management
		Location Replicator
		Obligation
		Person
		Tax Role
Accounting	Admin	Account Type
		Accounting Calendar
		Adjustment Cancel Reason
		Adjustment Type
		Adjustment Type Extension
		Adjustment Type Profile
		Approval Profile
		Debt Category
		Debt Category Priority
		Distribution Code

Module	Menu	Menu Items
		Division
		Frequency
		Fund
		General Ledger Division
		Location Type
		Obligation Type
		Obligation Type Start Option
		Obligation Type Start Option Merge
		Overpayment Process Type
		P&I Control
		Person Type
		Postal Code Default
		Rate Factor
		Rate Factor Value
		Rate Quantity Identifier
		Rate Quantity Rule
Accounting	Main	Account
		Account Financial History
		Adjustment
		Adjustment Staging Control
		Adjustment Upload Staging
		Balance Control
		Detailed View of P&I
		Financial Transaction
		Multiple P&I Adjustments
		Multiple Adjustments
		Obligation
		Obligation Cash Accounting Balance
		Obligation Financial History
		Overpayment Process
		Person
		Rate Check
		Rate Component

Module	Menu	Menu Items
		Rate Schedule
		Rate Schedule Merge
		Rate Version
		Rate Version Merge
		Waiver
Forms	Admin	Account Type
		Accounting Calendar
		Adjustment Cancel Reason
		Adjustment Type
		Adjustment Type Profile
		Contract Quantity Type
		Debt Category
		Debt Category Priority
		Distribution Code
		Division
		Exception Category
		Form Change Reason
		Form Rule
		Form Rule Group
		Form Source
		Form Type
		Form Upload Staging Type
		Frequency
		Fund
		General Ledger Division
		Identifier Type
		Industry Code
		Location Type
		Obligation Type
		Obligation Type Start Option
		Obligation Type Start Option Merge
		Person Relationship Type
		Person Type

Module	Menu	Menu Items
		Rate Factor
		Rate Factor Value
		Rate Quantity Identifier
		Rate Quantity Rule
Forms	Main	Account
		Adjustment
		Financial Transaction
		Form Batch Header
		Form Upload Staging
		Obligation
		Obligation Cash Accounting Balance
		Obligation Financial History
		Person
		Registration Form
		Rate Check
		Rate Component
		Rate Schedule
		Rate Schedule Merge
		Rate Version
		Rate Version Merge
		Tax Form
		Tax Role
Payments	Admin	Account Type
		Auto Pay Route Type
		Auto Pay Source Type
		Bank
		Debt Category
		Debt Category Priority
		Distribution Code
		Distribution Rule
		Division
		Identifier Type
		Location Type

Module	Menu	Menu Items
		Match Event Cancel Reason
		Match Type
		Obligation Type
		Obligation Type Start Option
		Obligation Type Start Option Merge
		Pay Cancel Reason
		Payment Segment Type
		Person Type
		Tax Type
		Tender Source
		Tender Type
Payments	Main	Account
		Account Payment History
		Adjustment
		Deposit Control
		Deposit Control Staging
		Financial Transaction
		Financial Transactions on Payment
		Match Event
		Obligation
		Payment
		Payment Event
		Payment Event Quick Add
		Payment Event Upload Staging
		Payment Quick Add
		Payment Upload Staging
		Payment/Tender Search
		Person
		Tender Control
Billing	Admin	Account Type
		Bill Cancel Reason
		Bill Charge Line Type
		Bill Cycle

Module	Menu	Menu Items
		Bill Message
		Bill Period
		Bill Route Type
		Bill Segment Type
		Billable Charge Template
		Contract Quantity Type
		Debt Category
		Debt Category Priority
		Distribution Code
		Division
		Frequency
		Fund
		Identifier Type
		Location Type
		Obligation Type
		Obligation Type Start Option
		Obligation Type Start Option Merge
		Person Type
		Rate Factor
		Rate Factor Value
		Rate Quantity Identifier
		Rate Quantity Rule
		Tax Exempt Type
		Tax Type
		Unit Of Measure
Billing	Main	Account
		Account Bill / Payment History
		Adjustment
		Adjustment Upload Staging
		Bill
		Bill Print Group
		Bill Segment
		Billable Charge

Module	Menu	Menu Items
		Billable Charge Upload Staging
		Financial Transaction
		Financial Transactions on Bill
		Location
		Multi-Cancel/Rebill
		Obligation
		Obligation Billing History
		Person
		Rate Check
		Rate Component
		Rate Schedule
		Rate Schedule Merge
		Rate Version
		Rate Version Merge
Case Management	Admin	Account Type
		Accounting Calendar
		Adjustment Type
		Adjustment Type Profile
		Alert Type
		Collection Agency
		Collection Case Type
		Collection Class
		Collection Class Overdue Rules
		Debt Category
		Distribution Code
		Division
		Fund
		General Ledger Division
		Location Type
		Obligation Type
		Obligation Type Start Option
		Obligation Type Start Option Merge
		Overdue Event Cancel Reason

Module	Menu	Menu Items
		Overdue Event Type
		Overdue Process Template
		Pay Plan Recommendation Rule
		Person Relationship Type
		Person Type
		Tax Type
		Terms and Conditions
Case Management	Main	Account
		Adjustment
		Appeals
		Audit Case
		Bankruptcy
		Collection Agency Referral
		Collection Case
		Financial Transaction
		Obligation
		Obligation Financial History
		Overdue Process
		Pay Plan
		Person
		Suppression
		Tax Form
		Tax Role
		Tax Sale

Appendix B

New Menu Layout

Obsolete Submenus

The submenus listed in the table below are no longer applicable in the base product, as all associated base-own menu lines/items have been moved to a different place upon menu re-alignment. During the system data upgrade a special verification will be performed to ensure that no Customer Modification-owned menu line/items are affected. As a result:

- If no Customer Modification-owned menu lines / items are found to be associated with a submenu and the submenu is no longer in use, it will be deleted
- If a submenu that is no longer applicable in the base package is associated with any Customer Modification-owned menu line / item, the submenu will become Customer Modification-owned

Menu	Submenu
Admin	Case Type
Admin	Compliance
Main	Financial
Main	Financial Queries
Main	Compliance

Renamed Submenus

The following table highlights any menu that has been renamed.

Menu	Old Description	New Description
Admin	Taxpayer Information	Registration
Main	Taxpayer Information	Registration

New Submenus

The following table highlights new submenus.

Menu	Submenu
Admin	Accounting
Admin	Case Management
Main	Payments
Main	Accounting
Main	Case Management
Main	Payments

Main Menu Items by Submenu

The following table lists the transactions that are found under each submenu. Note that transactions that have been added in this release are also included.

Submenu	Submenu Name
Accounting	Account Financial History
	Adjustment
	Adjustment Staging Control
	Adjustment Upload Staging
	Balance Control
	Financial Transaction
	Multiple Miscellaneous Adjustments
	Multiple P&I Adjustments
	Obligation Cash Accounting Balance
	Obligation Financial History
	Overpayment Process
	P&I Detailed View
	Waiver
Billing	Account Bill Payment History
	Bill
	Bill Print Group
	Bill Segment
	Billable Charge
	Billable Charge Upload Staging
	Financial Transactions on Bill

Submenu	Submenu Name
	Multi-Cancel/Rebill
	Obligation Billing History
Case Management	Appeal
	Audit Case
	Bankruptcy
	Suppression
	Collection Agency Referral
	Collection Case
	Overdue Process
	Pay Plan
Forms	Form Batch Header
	Form Upload Staging
	Registration Form
	Tax Form
Payments	Account Payment History
	Deposit Control
	Deposit Control Staging
	Financial Transactions on Payment
	Match Event
	Payment
	Payment Event
	Payment Event Quick Add
	Payment Event Upload staging
	Payment Quick Add
	Payment Upload Staging
	Payment/Tender Search
	Tender Control
Rates	Rate Check
	Rate Component
	Rate Factor
	Rate Factor Value
	Rate Schedule
	Rate Schedule Merge

Submenu	Submenu Name
	Rate Version
	Rate Version Merge
Registration	Account
	Account Person Replicator
	Location
	Location Management
	Location Replicator
	Obligation
	Person
	Tax Role
Work Management	Case
	Customer Contact
	Process Flow
To Do (FW)	Supervisor To Do Assignment
	Supervisor To Do Summery
	Supervisor User Summary
	To Do Entry
	To Do List
	To Do Search
	To Do Summary
XAI	Outbound Message
	XAI Dynamic Upload
	XAI Staging Control
	XAI Upload Staging
Batch	Batch Job Submission
	Batch Run Tree
	Report History
	Report Submission
	Request
	Sample & Submit Request

Admin Menu Items by Submenu

Submenu	Submenu Name
Accounting	A/P Request type
	Accounting calendar
	Adjustment Cancel Reason
	Adjustment Type
	Adjustment Type Extension
	Adjustment Type Profile
	Approval Profile
	Debt Category
	Debt Category Priority
	Distribution Code
	Fund
	General Ledger Division
	Overpayment Process Type
	P&I Control
	Revenue Class
	Terms & Conditions
	Waiver Type
Audit Query	Audit Query b Table/Field/Key
	Audit Query by User
	Inquiry Audit
Billing	Bill Cancel Reason
	Bill Charge Line Type
	Bill Cycle
	Bill Message
	Bill Period
	Bill Route Type
	Bill Segment Type
	Billable Charge Template
Case Management	Appeal type
	Audit Case Type
	Bankruptcy Type

Submenu	Submenu Name
	Review Process Control
	Review Type
	Suppression Type
	Collection Agency
	Collection Case Type
	Collection Class
	Collection Class Overdue Rules
	Overdue Event Cancel Reason
	Overdue Event Type
	Overdue Process Template
	Pay Plan Recommendation Rule
Config Lab	Account Staging
	Difference Query
	Root Object
Conversion (FW)	FK Validation Summary
	Validation Error Summary
Database (FW)	Application Viewer
	DB Instruction
	DB Process
	Environment Reference
	Extendable Lookup
	FK Reference
	Field
	Lookup
	Maintenance Object
	Table
	Translatable Strings Exceeding Capacity
External Message (FW)	External System
	Outbound Message Type
Financial (FW)	Currency
Form	Exception Category
	Form Change Reason
	Form rule

Submenu	Submenu Name
	Form Rule Group
	Form Source
	Form Type
	Form Upload Staging Type
General (FW)	Country
	Display Profile
	Filing Calendar
	Installation Options
	Installation Options - Framework
	Language
	Phone Type
	Seasonal Type Shift
	Time Of use
	Time Zone
	To Do Role
	To Do Type
	Work Calendar
	Request Type
Geographic	Geographic Type
	Location Type
	Postal Code Default
Payments	Auto Pay Route Type
	Auto Pay Source Type
	Bank
	Distribution Rule
	Match Event Cancel reason
	Match Type
	Pay Cancel reason
	Payment Segment Type
	Tender Source
	Tender Type
Rates	Frequency
	Rate Quantity Identifier

Submenu	Submenu Name
	Rate Quantity Rule
	Unit Of Measure
Registration	Account Management Group
	Account Relationship Type
	Account Type
	Contract Quantity Type
	Division
	Identifier Type
	Industry Code
	Obligation Type
	Obligation type Start Option
	Obligation type Start Option merge
	Person relationship type
	Person Type
	Tax Exempt Type
	Tax Type
Reporting (FW)	Report Definition
	Reporting Options
Security (FW)	Access Group
	Application Service
	Data Access Role
	LDAP Import
	Security Type
	User
	User Group
System	Activity Type
	Algorithm
	Algorithm Type
	Batch Control
	Bundle export
	Bundle import
	Business Object
	Business Service

Submenu	Submenu Name
	Cobol Program
	Characteristic Type
	Context Sensitive Zone
	Data Area
	Display Icon Reference
	Embedded Help
	Feature Configuration
	Function
	Managed Content
	Menu
	Message
	Navigation Key
	Navigation Option
	Portal
	Revision History Search
	Script
	Script merge
	Service Program
	Status Reason
	UI Map
	Zone
	Zone Type
	Master Configuration
Work Management	Alert Type
	Care Type
	Customer Contact Class
	Customer Contact Type
	Letter Template
	Process Flow Type
XAI (FW)	Web Service Adapter
	XAI Adapter
	XAI Class
	XAI Command

Submenu	Submenu Name
	XAI Dynamic Submission
	XAI Envelope Handler
	XAI Executer
	XAI Format
	XAI Group
	XAI Inbound Service
	XAI JDBC Connection
	XAI JMS Connection
	XAI JMS Queue
	XAI JMS Topic
	XAI JNDI Server
	XAI Option
	XAI Receiver
	XAI Sender
	XAI Service Export
	XAI Service Import
	XAI Submission